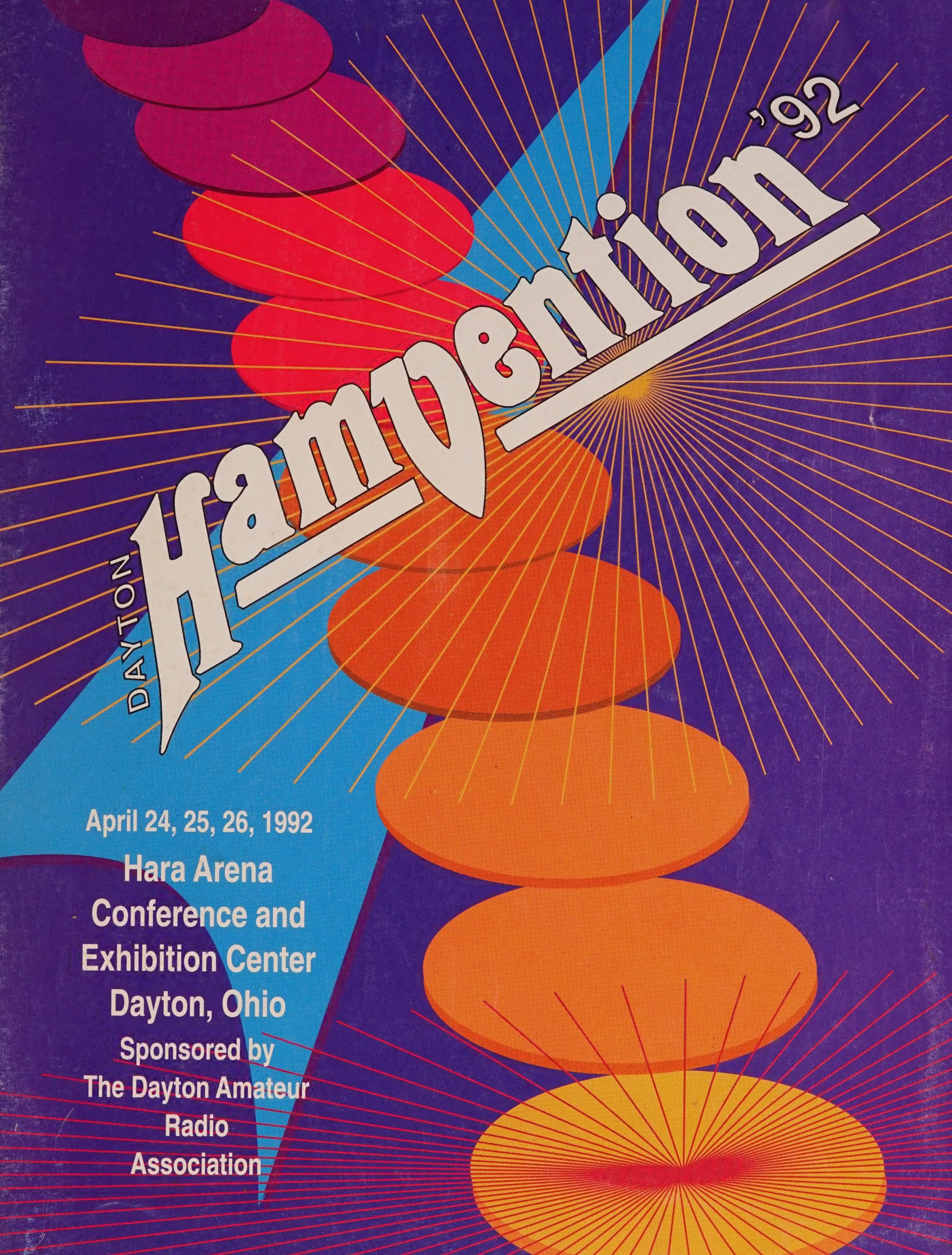
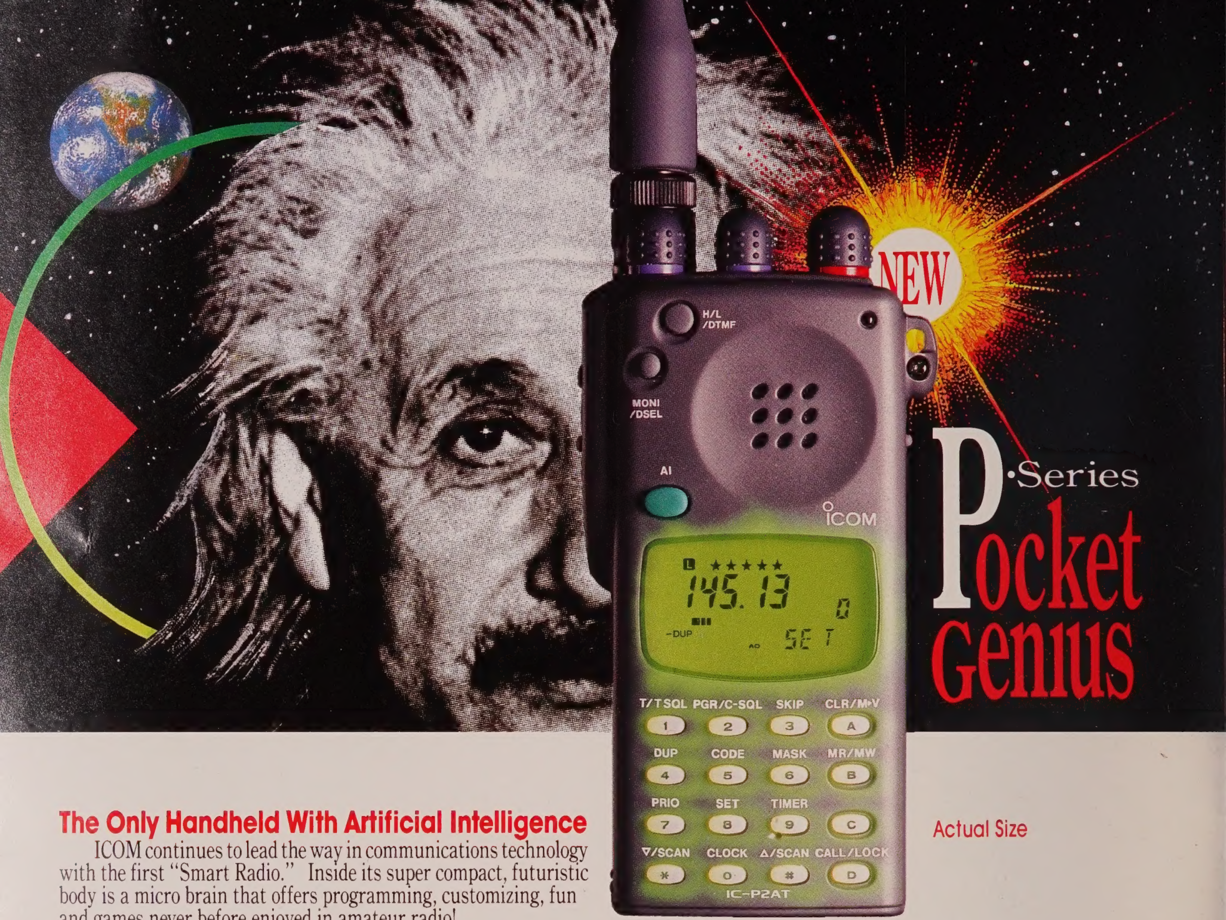


DAYTON Hamvention '92

April 24, 25, 26, 1992

Hara Arena
Conference and
Exhibition Center
Dayton, Ohio

Sponsored by
The Dayton Amateur
Radio
Association



Actual Size

The Only Handheld With Artificial Intelligence

ICOM continues to lead the way in communications technology with the first "Smart Radio." Inside its super compact, futuristic body is a micro brain that offers programming, customizing, fun and games never before enjoyed in amateur radio!

The P-Series Pocket Genius actually asks you questions, determines your abilities and provides only the features you can handle. It is the perfect answer for making amateur radio simple and fun for new hams — yet in the hands of an experienced user, will prove to be the most advanced, full featured handheld in history!

The Most Full Featured Handheld Ever Built

ICOM has been listening to your suggestions and has responded with a handheld featuring everything you've ever wanted…and more: **100 Memories** - more than any other handheld. **16 Autodial Memories** - one touch of a button makes your call. **Illuminated Keypad and Display** allows nightime use. **Large Display** is easier to read. **DC Socket** for charging at home. Optional **DTMF Pager** lets anyone call your handheld with a 3-digit code. **Memory Skip** and **Mask** allows you to customize memories to be scanned.

P2AT 2 Meters, **P3AT** 220MHz, **P4AT** 440MHz.

New Hams in the Family

will appreciate the many easy-to-use features, small size and exciting question-and-answer games. They will have fun learning and advancing with the "Pocket Genius." And with autodial memories, they can have "911" emergency access at the touch of one button!

Be one of the first to experience amateur communications of the 21st century!

The World's Smartest Handheld!

For more information, see your ICOM dealer or call the ICOM Brochure Hotline 1-800-999-9877.

ICOM America, Inc., 2380-116th Ave. N.E., Bellevue, Washington 98004
Customer Service Hotline (206) 454-7619
All stated specifications are subject to change without notice or obligation. All ICOM radios significantly exceed FCC regulations limiting spurious emissions. P2AT192

ICOM
Simply the Best®

See us in Booth 021,022,023,046,047 & 048 *We are a Hamvention Prize Donor*

STANDARD®

WORLD'S SMALLEST FULL-KEYBOARD HANDHELD

•

REPLACEABLE MEMORY CHIP 40 to 200 channels

•

WIDE BAND RECEIVE COVERAGE

Let STANDARD take you to the TOP. C168A for 2 Meter and C468A for 70 cm operation. 5 watts output from 12 volts. 7 types of SCAN (pause, busy and hold). CTCSS encode/decode included. Rubberized non-slip knobs and keypad. Rugged Aluminum Back. Doubles as a powerful heat sink and securely mounts belt clip. Acoustically Balanced Speaker, delivers full-fidelity audio. Direct Keyboard Entry. Four Batteries Available, plus battery case (5 AA) as options.

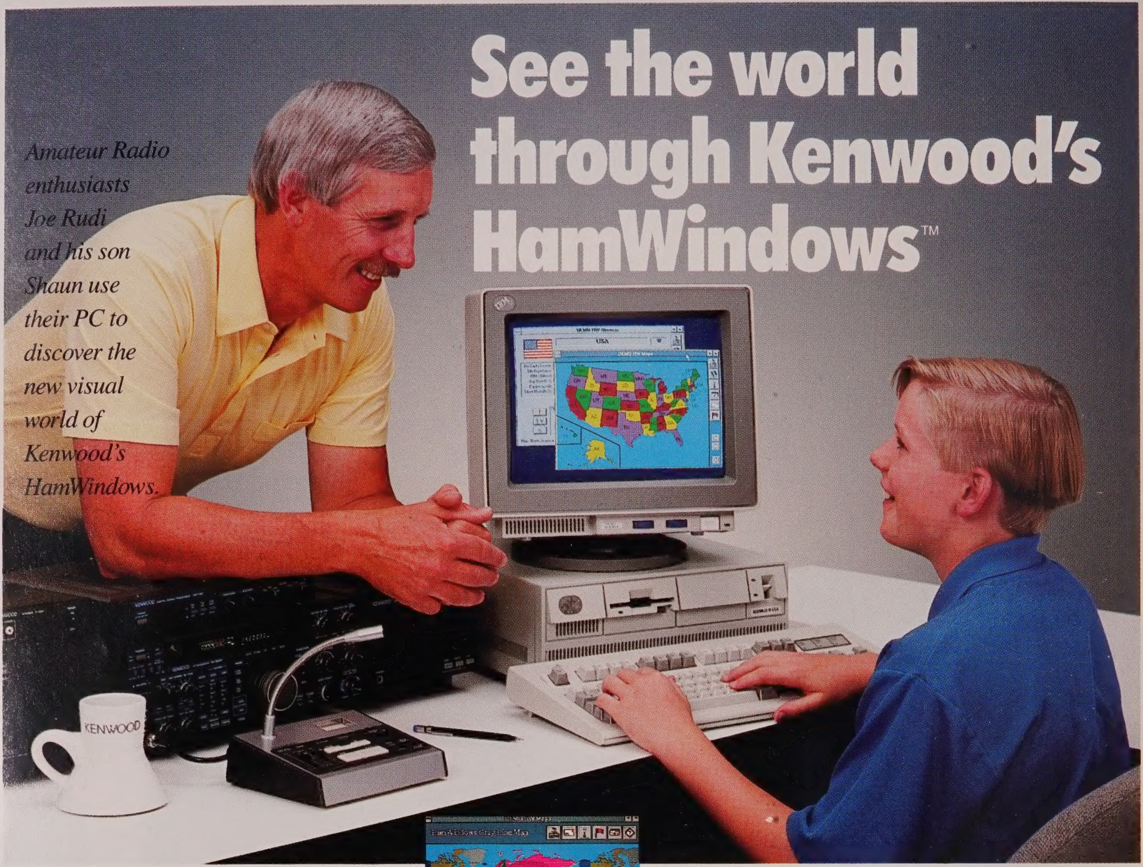
For more information on this and other STANDARD products, contact your nearest dealer or call STANDARD Amateur Radio Products at (312) 763-0081.

Specifications, price and features are subject to change without obligation or notice. All products carry a ONE YEAR limited warranty.

STANDARD Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60648

STANDARD.

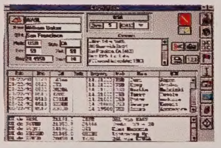
See us in Booth 208,209,210,220,221, and 222 We are a Hamvention Prize Donor



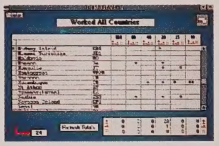
See the world through Kenwood's HamWindows™

Amateur Radio enthusiasts Joe Rudi and his son Shaun use their PC to discover the new visual world of Kenwood's HamWindows.

HamWindows™ is an all new concept in the world of Amateur Radio. This program pulls together eight full color "windows" including transceiver control, station log, world almanac, awards tracking, SWL data base, greyline maps, regional world maps, and packet TNC control.



Using a mouse to "point and click" HamWindows™ lets you see the world your transceiver hears. Use the almanac to learn more about the countries you contact, and then add the QSO to the logging program. You'll automatically track contacts for the DXCC award. The SWL data base lists thousands of frequencies and schedules from over 9,000 broadcast stations. And the greyline and regional maps put the world at your fingertips. With the proper interface you can even control your Kenwood HF transceiver.



HamWindows™ is the one program every amateur or shortwave listener needs. See your Kenwood dealer for system requirements and more information.

KENWOOD

...pacesetter in Amateur Radio

KENWOOD U.S.A. CORPORATION *COMMUNICATIONS & TEST EQUIPMENT GROUP*
P.O. BOX 22745, 2201 E. Dominguez Street, Long Beach, CA 90801-5745

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HamWindows is a trademark of California Software, Inc.

See us in Booth 050,051,052,071,072,073 We are a Hamvention Prize Donor

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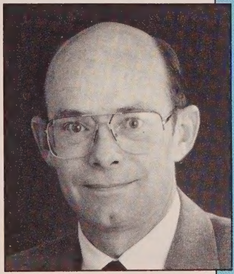
Chairman's Welcome

ROSS BROWN, WA8DQH
General Chairman



DAVE GRUBB, KC8CF
Assistant
General Chairman

WELCOME

On behalf of the Dayton HAMVENTION Committee and its sponsor, the Dayton Amateur Radio Association, I am proud to welcome you to the 41st annual HAMVENTION.

During the past year, the HAMVENTION committee has been hard at work to put together a great event. Our goal was to provide the biggest and best HAMVENTION ever. This year, there are more than 250 commercial exhibitors and more than 1100 flea market exhibitors. Exciting, informative forums are scheduled for all three days of HAMVENTION and various social gatherings will be held all weekend both at HAMVENTION and other locations listed in the unofficial functions section of the program.

Most importantly, the HAMVENTION committee wishes you to have a great time. Enjoy the weekend, have a safe trip home, and make your reservations early for next year.

73,
Ross M Brown
Ross M. Brown, WA8DQH
General Chairman

AVAILABLE NOW!
FANTASTIC 2-METER H.T.'s
HIGH PERFORMANCE AT A GREAT PRICE

- **DJ-F1TH World's smallest 5 watt H.T.**
- **DJ-162TR Full featured 2-meter comes standard with EDC-34 rapid charger**

New Model DJ-580T

RATED # 1 IN JAPAN, NOW AVAILABLE IN THE U.S.

A super-compact handheld, the tiny DJ-580T is a powerful, feature-packed twin bander. This super-compact HT is the smallest you'll find, and literally fits in the palm of your hand.

Ergonomic design, combined with excellent sensitivity and unbelievable great sound, sets a new standard for miniature HT's.

New MCF function allows you to set the 40 memory channels regardless of which channels you want for VHF or UHF. Any combination is possible.

Alinco's DJ-580T has Full-Duplex Cross Band Operation and Cross Band Repeater Functions with real world power and excellent sensitivity. Airband receive with simple modification.

If the battery is depleted to less than 5 volts, Alinco's Patented Super Low Battery Consumption Function is automatically activated. You can continue to operate the radio all the way down to 3.5 volts. This feature is effective with dry cell batteries only.

This unit has built in DSQ for paging, CTCSS encode and decode standard, various scanning functions, 3 power level selections for each band, bell function, and an illuminated keypad.

Check out the affordable technology of the 90's.
Check out ALINCO.

ALINCO
ALINCO ELECTRONICS INC.

ALINCO ELECTRONICS INC.
438 Amapola Avenue, Unit 130, Torrance, CA 90501
Tel. (310) 618-8616 Fax (310) 618-8758

Two Year Limited Warranty.
Specifications and features are subject to change without notice or obligation.

See us in Booth 635,636,628,629 We are a Hamvention Prize Donor

Times and Places

Exhibit Hours ...

Exhibits open and prizes on display.

Friday	Noon - 6:00 P.M.
Saturday	8:00 A.M. - 5:00 P.M.
Sunday	8:00 A.M. - 2:00 P.M.

Flea Market Hours ...

Friday	8:00 A.M. - 6:00 P.M.
Saturday	6:00 A.M. - 5:00 P.M.
Sunday	6:00 A.M. - 4:00 P.M.

Forum Hours ...

Friday	1:00 P.M. - 4:45 P.M.
Saturday	9:00 A.M. - 5:00 P.M.
Sunday	9:00 A.M. - 2:00 P.M.

Prize Drawings ...

Drawing for major prizes: 3:00 P.M. Sunday

All areas except Prize Drawing Area (Hara Arena) will be closed and secured at 2:00 P.M. Sunday. Hara Arena will be closed after the last prize is drawn.

Baggage Check ...

Room adjacent to Hamvention office. $1.00 per claim check.

Lost and Found ...

Please take items to the Hamvention office. See map on pages 74 & 75.

License Exams ...

Amateur radio examinations are scheduled for the mornings of Saturday, April 25, and Sunday, April 26. All elements will be administered. Advance registrations only.

Examinations will be administered at Meadowdale High School. Shuttle bus service to/from Hara Arena will be provided.

Test Bench ...

Marconi Instruments and Communications Associates will have test benches available inside the building for you to check-out your purchases (see booths 420 and 511). They will provide power, service monitor, dummy load and wattmeter. Neither DARA, Marconi Instruments nor Communications Associates will be responsible for damages to your equipment.

Air Freight Service ...

Delta Air Freight Cargo is offering a 40% discount off the published rate, with a $30 minimum, to over 150 cities. Delta will have a representative at the Hamvention to handle your shipping needs and will provide free truck service to the airport. Booths 204 and 216. See map on pages 74 & 75.

Hours:	Friday	9:00 A.M. - 6:00 P.M.
	Saturday	9:00 A.M. - 6:00 P.M.
	Sunday	9:00 A.M. -

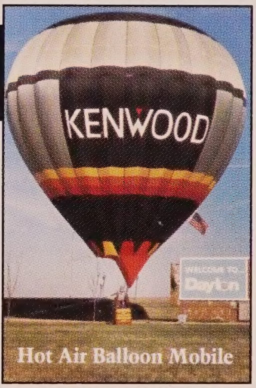
Message Center ...

Leave a message for your friends by entering their call sign and message at the DARA Booth #001 (see map pages 74 & 75). Prize monitors throughout the arena complex and at the DARA booth will periodically list "message holding", by call sign.

Talk-in Frequencies ...

For directions and assistance in the Dayton Area during your visit to Hamvention, contact "Talk-In" on the DARA Repeater 146.94 MINUS, (alternate 146.91 MINUS). Dayton Hams also monitor 222.94 MINUS, 442.1 PLUS, and 7.258 MHz (Midcars) and may be able to assist. General Hamvention information is available on 530 A.M.

Special Event Station ...



Hot Air Balloon Mobile

Hot Air Balloon Mobile

Weather permitting, up to six hot air balloons will launch from Hamvention grounds during Dayton '92. Each balloon will be carrying a special event station from approximately 7:00 A.M. to 8:00 A.M. EDT both Saturday and Sunday.

Aeronautical QSO's can be made on 146.55, 146.58, 147.51, 147.54, 147.57 and 147.60 MHz simplex.

Special prize donated by Kenwood U.S.A. One TH27A hand-held transceiver will be given to a QSL contact randomly selected from log entries.

Special QSL cards will be sent to those contacting the Kenwood balloon.

Drawing to be held at 12:00 (noon) on Sunday at Kenwood's Tour De Force Exhibit.

Kantronics**D4-10**

"I am now the proud owner of a D4-10 radio. I want to tell you what an absolutely superb piece of equipment this is. It performs great. Genuine direct modulation, effortless receive bandwidth, and a REAL 10 watts output."

James Miller G3RUH

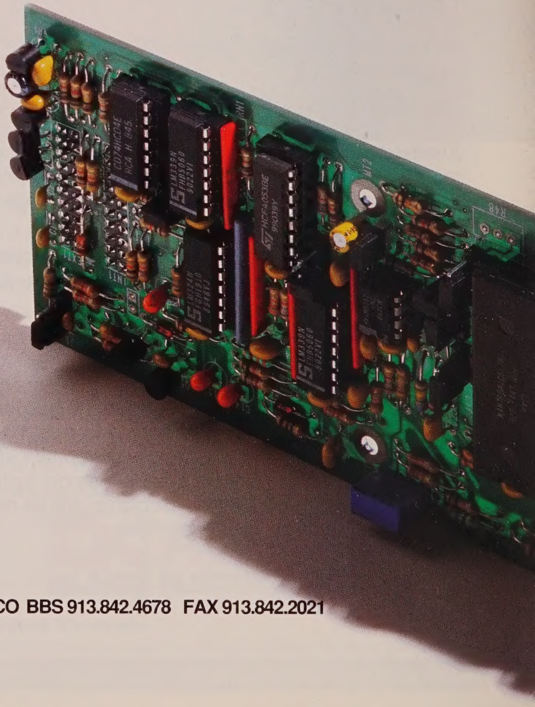
19,200 off the shelf

No tweaking, no kludges, no kidding . . .The new Kantronics D4-10 transceiver provides robust 19,200 baud operation off the shelf, today. Manufactured to respond to your requests for a faster more powerful transceiver, the D4-10 represents state of the art design equalling that found in our DataEngine and beyond that found anywhere else in the industry.

The Kantronics D4-10 features user selectable narrow and wide bandwidth operation (60 KHZ). This provides conventional and high speed data modes at 1200, 9600, and up to 19,200 baud and beyond with our DataEngine and DE19200 plug-in module.

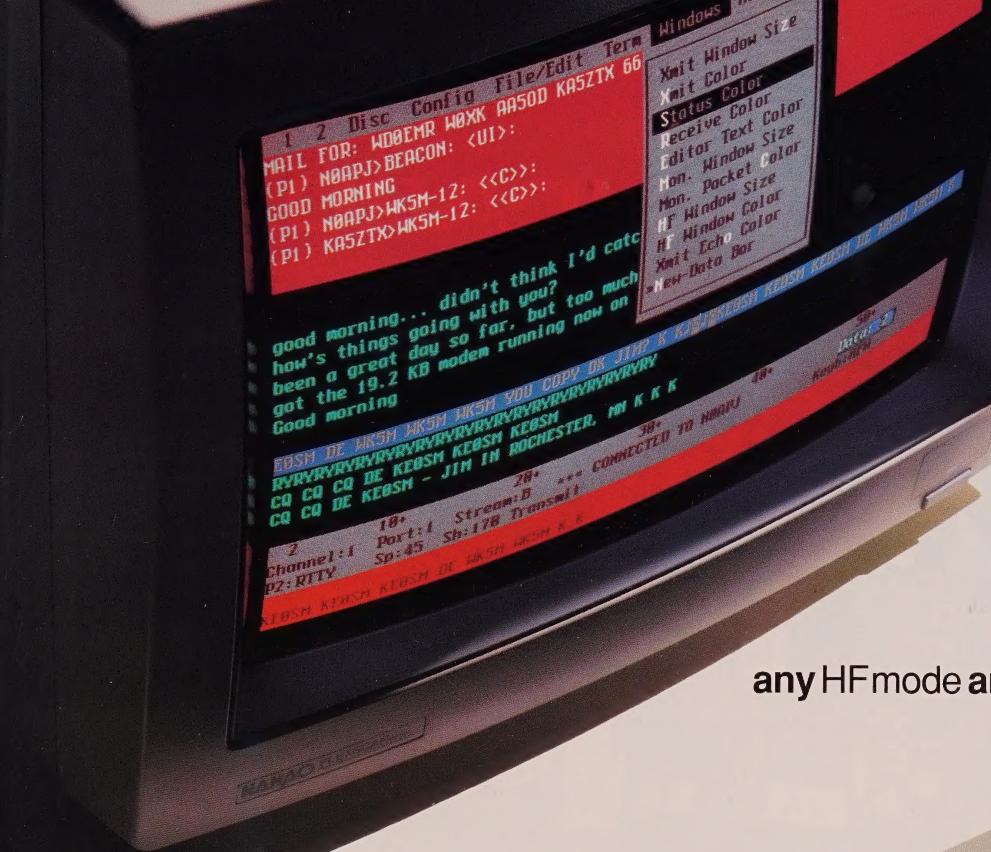
Add features like a DVR2-2 plug compatible analog port for experimentation, TTL port which supports internal DFSK modulation and threshold demodulation, fast TR switching and you have a 70 cm transceiver that is as fun to use as it is technologically advanced.

The Kantronics D4-10 transceiver, the state of the art available off the shelf from Kantronics.



Kantronics 1202 E. 23rd St., Lawrence, KS 66046 913.842.7745 TELCO BBS 913.842.4678 FAX 913.842.2021

See us in Booth 041,042,043,044



```
MAIL FOR: WD0EMR W0XK AA5OD KA5ZTX 66
(P1) N0APJ>BEACON: <UI>:
GOOD MORNING
(P1) N0APJ>WK5M-12: <<C>>:
(P1) KA5ZTX>WK5M-12: <<C>>:

good morning... didn't think I'd catc
how's things going with you?
been a great day so far, but too much
got the 19.2 KB modem running now on
Good morning
E0SM DE WK5M WK5M WK5M YOU COPY OK JIM? K KJ
RYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRYRY
CQ CQ CQ DE KE0SM KE0SM KE0SM
CQ CQ DE KE0SM - JIM IN ROCHESTER, MN K K K
   2        10+          20+        30+           40+
Channel:1  Port:1  Stream:B  *** CONNECTED TO N0APJ
P2:RTTY    Sp:45   Sh:170 Transmit
KE0SM KE0SM KE0SM DE WK5M WK5M K K
```

any HF mode and Packet...

...at the same time

The new Kantronics version 5.0 firmware release, the Hostmaster II-Plus and Hostmaster 64 terminal software upgrades expand the Kantronics multi-mode single keyboard system. With a PC compatible or Commodore 64 computer, a Kantronics All Mode (KAM 5.0), your own HF/VHF transceivers and just a few keystrokes, you can work any mode on HF and packet on VHF at the same time.

Now with KAM version 5.0 firmware, you can operate CW, RTTY, ASCII, FEC, ARQ, packet or copy NAVTEX on HF and packet on VHF/UHF simultaneously. Toggle back and forth between any HF mode and packet, view monitored and connected packets and HF data at the same time, and output text to your printer.

New firmware features (terminal program independent) include AMTOR access to your personal mailbox and SEND PRIVATE, SEND BULLETIN, SEND TRAFFIC and enhanced listing mailbox commands. In HOST mode it provides a blinking mail waiting LED when used with updated Hostmaster terminal software.

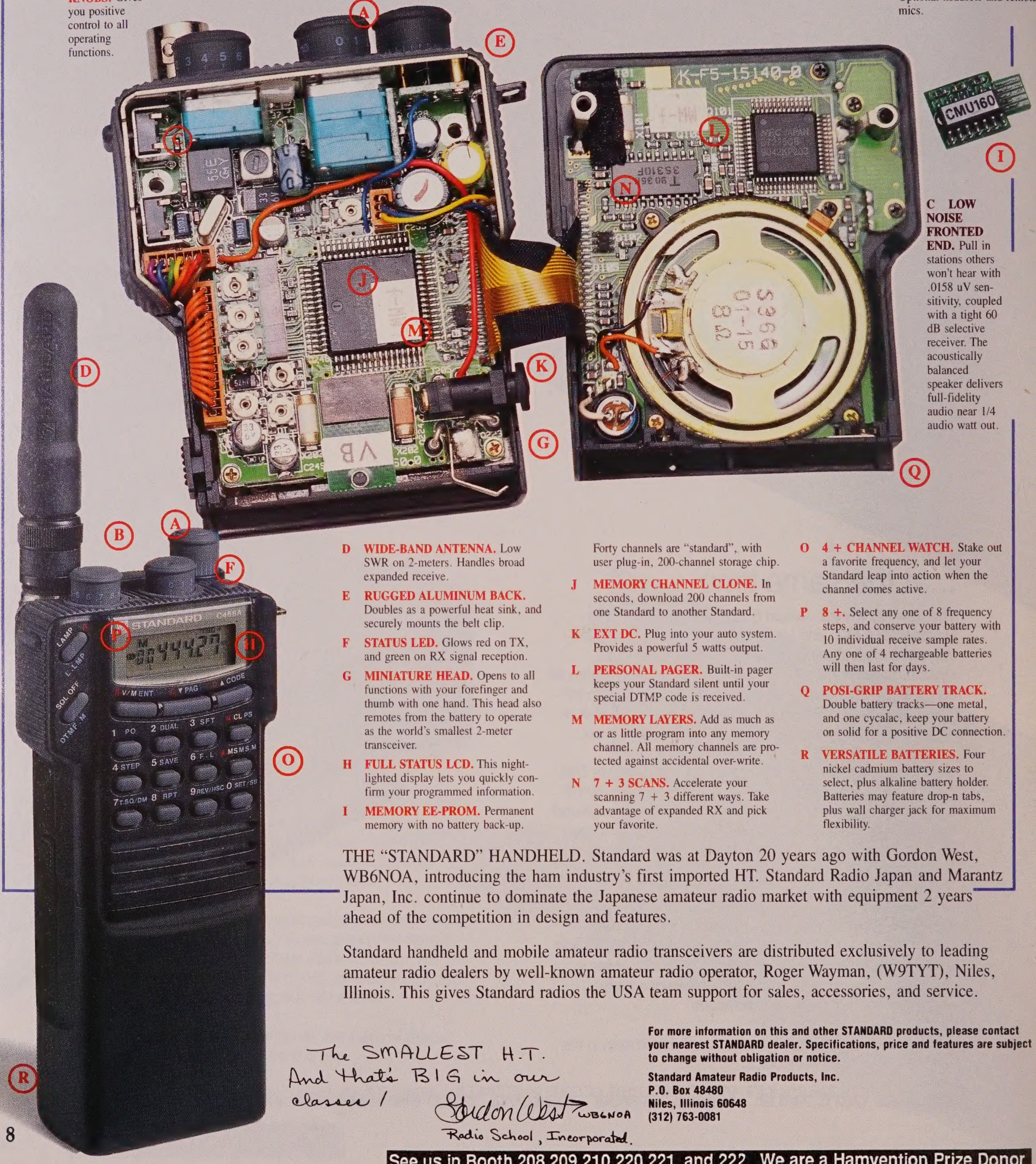
The Hostmaster/KAM combination. . . the next step in the state of the art from Kantronics.

Kantronics 1202 E. 23rd St., Lawrence, KS 66046 913.842.7745 TELCO BBS 913.842.4678 FAX 913.842.2021

See us in Booth 041,042,043,044

ANATOMY • OF • A

SR STANDARD®



A NEOPRENE KNOBS. Gives you positive control to all operating functions.

B MIC & SPEAKER JACKS. Optional headsets and remote mics.

C LOW NOISE FRONTED END. Pull in stations others won't hear with .0158 uV sensitivity, coupled with a tight 60 dB selective receiver. The acoustically balanced speaker delivers full-fidelity audio near 1/4 audio watt out.

D WIDE-BAND ANTENNA. Low SWR on 2-meters. Handles broad expanded receive.

E RUGGED ALUMINUM BACK. Doubles as a powerful heat sink, and securely mounts the belt clip.

F STATUS LED. Glows red on TX, and green on RX signal reception.

G MINIATURE HEAD. Opens to all functions with your forefinger and thumb with one hand. This head also remotes from the battery to operate as the world's smallest 2-meter transceiver.

H FULL STATUS LCD. This night-lighted display lets you quickly confirm your programmed information.

I MEMORY EE-PROM. Permanent memory with no battery back-up. Forty channels are "standard", with user plug-in, 200-channel storage chip.

J MEMORY CHANNEL CLONE. In seconds, download 200 channels from one Standard to another Standard.

K EXT DC. Plug into your auto system. Provides a powerful 5 watts output.

L PERSONAL PAGER. Built-in pager keeps your Standard silent until your special DTMP code is received.

M MEMORY LAYERS. Add as much as or as little program into any memory channel. All memory channels are protected against accidental over-write.

N 7 + 3 SCANS. Accelerate your scanning 7 + 3 different ways. Take advantage of expanded RX and pick your favorite.

O 4 + CHANNEL WATCH. Stake out a favorite frequency, and let your Standard leap into action when the channel comes active.

P 8 +. Select any one of 8 frequency steps, and conserve your battery with 10 individual receive sample rates. Any one of 4 rechargeable batteries will then last for days.

Q POSI-GRIP BATTERY TRACK. Double battery tracks—one metal, and one cycalac, keep your battery on solid for a positive DC connection.

R VERSATILE BATTERIES. Four nickel cadmium battery sizes to select, plus alkaline battery holder. Batteries may feature drop-n tabs, plus wall charger jack for maximum flexibility.

THE "STANDARD" HANDHELD. Standard was at Dayton 20 years ago with Gordon West, WB6NOA, introducing the ham industry's first imported HT. Standard Radio Japan and Marantz Japan, Inc. continue to dominate the Japanese amateur radio market with equipment 2 years ahead of the competition in design and features.

Standard handheld and mobile amateur radio transceivers are distributed exclusively to leading amateur radio dealers by well-known amateur radio operator, Roger Wayman, (W9TYT), Niles, Illinois. This gives Standard radios the USA team support for sales, accessories, and service.

The SMALLEST H.T.
And that's BIG in our classes!

Gordon West WB6NOA
Radio School, Incorporated.

For more information on this and other STANDARD products, please contact your nearest STANDARD dealer. Specifications, price and features are subject to change without obligation or notice.

Standard Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60648
(312) 763-0081

See us in Booth 208,209,210,220,221, and 222 We are a Hamvention Prize Donor

Registration and Ticket Sales

Hamvention

General Admission and Grand Banquet

General Admission (valid all 3 days) $14.00
Age 12 or younger, FREE

Banquet $24.00 (At Hara Arena)
$24.00 At The Door (If Available)

Tickets May Be Purchased

Thursday	Starting at noon
Friday	Starting at 7:00 A.M.
Saturday	Starting at 6:00 A.M.
Sunday	Starting at 6:00 A.M.

If banquet tickets are still available, they may be purchased at the banquet door between 6:00 P.M. and 6:30 P.M.

Ticket requests RECEIVED by April 3 (Canada - March 27) are sent by return mail. Orders received AFTER the deadlines are held for pick-up in the Hamvention office. BANQUET tickets will be sold until 12:00 (noon) at Hara Arena.

Alternate Activities Luncheon

(INCLUDES DOOR PRIZE DRAWING)

Luncheon	Saturday	$8.50
	Sunday	$8.50

LUNCHEON TICKETS ARE SOLD ONLY AT:

Hara Arena (Room 3)

Friday	2:00 P.M. to 3:00 P.M.

Meadowdale High School

Saturday	8:00 A.M. to 12:00 P.M. (noon)
Sunday	8:00 A.M. to 12:00 P.M. (noon)

A general admission ticket is required to attend the Alternate Activities. This ticket is also available at Meadowdale High School.

Flea Market

A general admission ticket is required to visit the Flea Market. Tickets to exhibit and sell at the Flea Market are sold in ADVANCE only! For 1993 Flea Market permits, watch for our ad in various amateur radio magazines. See page 77 for more Flea Market information.

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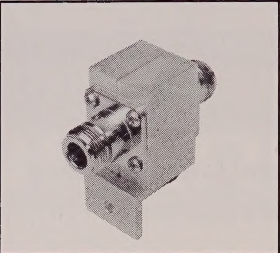
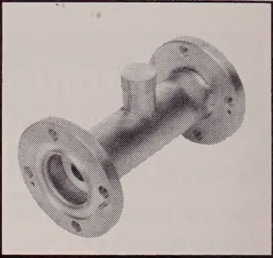
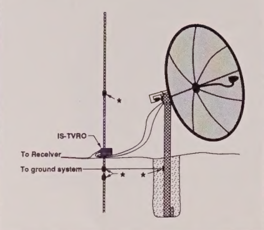


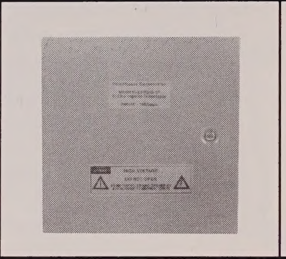
COAX TO 6 GHz



BROADCAST & MILITARY TO 50 KW



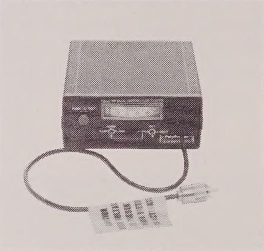
TVRO



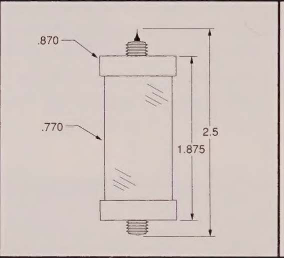
3ø POWER TO 480 VAC

STRIKE COUNTERS TOWER/POWER/PHONE

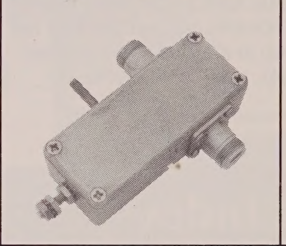
CHEMICAL GROUND SYSTEMS



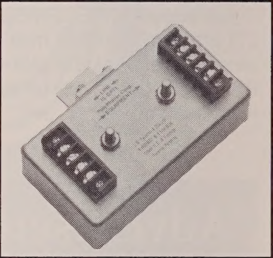
BREAKDOWN TESTERS



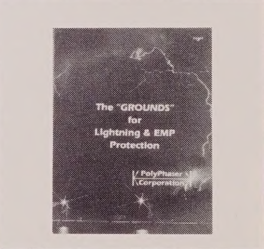
GAS TUBES TO 100 KA



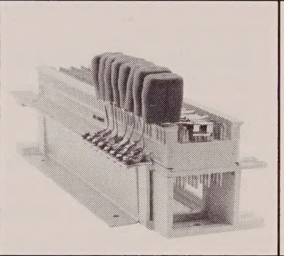
4 TO 23 GHz MICROWAVE DOWNCONVERTERS



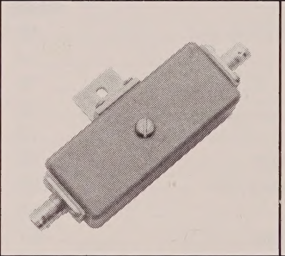
T-1 (TO DS-3 RATES)



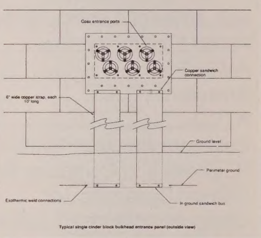
VIDEO & TUTORIAL BOOK



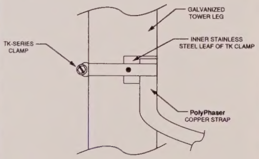
TWISTED PAIR



LAN/VIDEO


Coax entrance ports
Copper sandwich connection
6" wide copper strap, each 10' long
Ground level
Perimeter ground
Exothermic weld connections
In ground sandwich bus
Typical single cinder block bulkhead entrance panel (outside view)

ENTRANCE PANELS



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Other Information

Bus Transportation ...

AVOID PARKING PROBLEMS BY TAKING THE HAMVENTION BUSES.

Free Bus Service will be provided between Hara Arena and many hotels, motels, the Air Force Museum and designated parking lots. See schedules at the motel registration desks or on page 84 of this program or call Talk-In.

Wheelchairs ...

Wheelchairs are available at the Hamvention office.

Parking ...

There will be NO general parking at Hara Arena this year due to the construction of a golf course on the property. There will, however, be a special "Loading Pass" this year to allow you access to Hara for loading purposes. Please park in one of our designated parking areas and use our free shuttle bus.

Campers, trailers (self-contained vehicles) or vehicles that require more than one space will *not* be permitted to park in the Arena parking area, the Flea Market or at Salem Mall. Campers and trailers may park at Tall Timbers KOA or at the Montgomery County Joint Vocational School (MCJVS) (fee charged - see map on page 85). MCJVS parking will be available after 3:30 p.m. on Friday.

Loading Pass ...

Due to the lack of parking at Hara Arena, we will issue temporary loading passes to allow you access to Hara for loading large packages. Loading passes can be obtained at the Hamvention office near the Conference and Silver Arena entrance. See map on pages 74 & 75.

Handicapped Parking ...

Handicapped visitors have been issued special parking passes in advance.

Hamvention Phone Numbers ...

Hamvention Office	454-1456
On Site Office	274-1008
April 23 - 26 Only	
Emergency Only	274-1410

Future Hamvention Dates ...

April 23, 24, 25, 1993
April 29, 30, May 1, 1994
April 28, 29, 30, 1995

These dates are tentative and should be used only as a guide for future planning.

DARA Membership ...

If you would like to join the Dayton Amateur Radio Association (DARA), go to Booth #1 (next to the Prize Booth) in the Hara Arena building.

Membership through June 30, 1993: $6

Additional family membership (at the same address): $2 per person

Exhibitor Information ...

To receive information about becoming a new exhibitor at the 1993 Hamvention, leave your name and address at the DARA booth or write to:

Hamvention
Exhibits Chairman
P.O. Box 964
Dayton, OH 45401-0964

Unofficial Functions Listings ...

To be listed in the Unofficial Functions section of the 1993 program and/or our direct mail pieces:

Contact: Hamvention Publications Chairman
P. O. Box 964
Dayton, OH 45401-0964

Deadline for mailer: January 1, 1993

Deadline for program: March 1, 1993

Program Advertising ...

To receive information about becoming a new advertiser in the 1993 Hamvention program, leave your name and address at the DARA Booth or write to:

Hamvention Advertising Chairman
P. O. Box 964
Dayton, OH 45401-0964

Accurate Address Information Needed!

Did you fail to get advanced Hamvention information in the mail this year? If so, there may have been a problem with your mailing address. Our mailing list is

Visit the high power specialist at Booths 80-82!

Ameritron gives you...

a full kilowatt OUTPUT from a *quiet desktop* linear . . . for $1095

Ameritron AL-80A **$1095** Suggested Retail

Ameritron gives you a ***full*** kilowatt ***output*** (nearly the ***input*** of some linears) of peak envelope power for only $1095 -- from a whisper quiet linear that's perfect for your operating desk because it measures just 8¼″ H x 14″ D x 14¼″ W. You also get 850 watts output CW and 500 watts RTTY.

The AL-80A covers 160-15 meters (10 meters with license), including MARS and WARC. You could spend over *twice* the money for a legal limit amplifier *twice* the size -- and all you'll get is an additional 1/3 S-unit -- a difference you won't ever notice.

Tuned Input lets your rig deliver full output

The Ameritron AL-80A uses a direct switched, 100% shielded pi-network tuned input circuit so even the fussiest solid state transmitter works flawlessly with it.

Pi-L Output Network

A carefully designed Pi-L output network using the optimum Q for each band gives you exceptionally smooth tuning, extremely wide range load impedance matching and full band coverage. Ball bearing vernier reduction drives on both the plate and load control make tuning precise and easy.

Eimac 3-500Z in shielded RF tank gives you nearly 70% efficiency

You get the Eimac® 3-500Z transmitting tube with an estimated life of 20,000 hours ICAS. The AL-80A is built on a rugged steel chassis. It has a separate RF compartment that's fully shielded to keep RF from leaking out. This keeps RFI and TVI to a minimum.

A superb RF design and layout, a Hi-Q tank circuit and commercially rated power components gives you nearly 70% plate efficiency over the entire operating range. This puts the power into your antenna instead of heating up your amplifier.

A whisper quiet internal fan draws in cool air over the power supply components and the Eimac® 3-500Z tube to remove heat for longer tube life.

Built-in adjustable ALC circuit makes sure your exciter never overdrives your AL-80A. The result is a clean signal without flat-topping.

Gutsy Heavy-Duty Power Supply

The guts of the AL-80A is its heavy ***heavy*** duty power supply. A 22 pound transformer using a high silicone steel core, computer grade capacitors, heavy duty bleeders and ten 3 amp, 1000 V power rectifiers give you a stiff 2700 volts fully loaded. Some amplifiers using **two** 3-500Zs use a light power supply so they can't give much more power output than the AL-80A.

Step-Start Inrush Protection™

The AL-80A special Step-Start Inrush Protection stops damaging inrush current with a start up sequence that's easy on your tube and power supply components.

Multi-Voltage Primary

Too high line voltage stresses components and causes them to wear out. Too low line voltage causes a "soft-tube" effect — low output and signal distortion.

The Multi-Voltage Primary in the AL-80A lets you compensate for too high or too low line voltage so you get the longest component life and peak operating efficiency — regardless of line voltage.

Dual Illuminated Meters

Grid current of the 3-500Z is monitored continuously by one meter. Grid current gives the best indication of overall performance.

Multi-meter measures plate voltage, plate current, peak RF output power and drive power/ALC detector voltage.

Call your dealer for your best price today!

Bust through QRM with a full kilowatt -- right out of the box. Call your dealer for your best price and order today. Two year limited warranty.

600 WATTS OUT . . . $649

A tough low cost linear with REAL transmitting tubes!

AL-811 **$649** Suggested Retail

Ameritron's new AL-811 linear amplifier gives you plenty of power to bust thru QRM. You get a quiet desktop linear that's so compact it'll slide right into your operating position -- you'll hardly know it's there . . . until QRM sets in. And you can conveniently plug it into your nearest 120 VAC outlet.

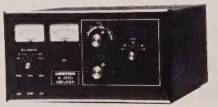
You get three tough 811A transmitting tubes. Plus you get extra heavy duty power supply, all HF band coverage, pressurized ventilation, tuned input, dual illuminated meters, adjustable ALC, operate/standby switch, transmit LED, UPS shippable and much more . . . for an incredible $649. Call your dealer for yours today!

AMERITRON offers the best selection of legal limit linears!

These 3 rugged linears all use a super heavy duty hipersil® power supply capable of 2500 watts!

Ameritron's most powerful amplifier

AL-1500 **$2625** Suggested Retail



Ameritron super power amplifier uses the herculean Eimac® 8877 ceramic tube.

It's so powerful that 65 watts drive gives you full legal output -- and it's just loafing because the power supply is capable of 2500 watts PEP.

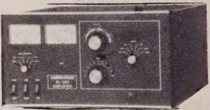
Ameritron's Dual 3-500Z linear

AL-82 **$1995** Suggested Retail

This linear gives you full legal output using a pair of Eimac® 3-500Zs. Some competing linears using dual 3-500Zs don't give you 1500 watts because their lightweight power supplies can't use the tubes to their full potential.

Ameritron's 3CX1200A7 linear

AL-1200 **$2045** Suggested Retail



Get ham radio's toughest tube with the Ameritron AL-1200—the Eimac 3CX1200A7. It has a 50 watt control grid dissipation—12 times tougher than the 4 watt rating of the 3CX800A7—yet you get the same full legal output as you get from a pair of 3CX800A7s.

AMERITRON brings you the finest high power accessories!

Legal limit antenna tuner

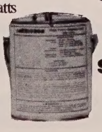
ATR-15 **$399** Suggested Retail

Ameritron — the high power specialist — brings you the ATR-15 antenna tuner that's designed for legal limit amplifiers. Heavy duty silver plated bandswitch virtually eliminates switch failure. High power transmitting capacitors. 1.8-30 MHz. Peak reading SWR/wattmeter. 6 position antenna switch. Selectable 1:1 or 4:1 balun. 5¼ x 13¼ x 13½ inches. Meter lamps uses 12 VDC.

Legal Limit Dummy Load

ADL-1500 **$59⁹⁵** Suggested Retail

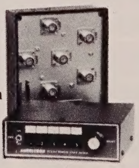
ADL-1500X **$39⁹⁵** Suggested Retail



Oil cooled so you can run the maximum legal limit of 1500 watts for 5 minutes. High quality industrial grade transformer oil included (no PCB). 50 ohms. SWR under 1.2:1 to 30 MHz. Low SWR to 400 MHz. **ADL-1500X** without oil, $39.95.

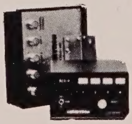
Remote Coax Switches

RCS-8V **$149** Suggested Retail



RCS-8V, DC-UHF 5 KW Coax Switch. Replace 5 coax feedlines with one with this Ameritron Coax switch. Weatherproof box mounts outdoors on your tower or mast. Attractive control unit sits on your operating desk. Low SWR to 450 MHz. Low loss. Rated at 5 KW to 30 MHz, 1 KW at 150 MHz.

RCS-4 **$134⁵⁰** Suggested Retail



RCS-4, $134.50. 4 position HF switch. Similar to RCS-8V. Requires no control cable Handles 2500 watts PEP.

New Products from AMERITRON

Ameritron's QSK-5 T/R Switch

... world's most advanced Transmit/Receive Switch gives you high power QSK operation from your linear amplifier

QSK-5 **$349** Suggested Retail

Handles 2500 watts PEP and 2000 watts CW in normal service, 750 watts continuous, positive voltage keying **AmpSaver**™, **SureSwitch**™ Order QSK-5 for 120 VAC and QSK-5X for 240 VAC.

ICP-120/240 **$79** Suggested Retail

Ameritron's *Step-Start Inrush Current Protector*™ stops damaging inrush current. By starting your linear amplifier through a high power current limiting resistor with a relay, you get a start up sequence that's *easy* on your tube and power supply components.

AMERITRON®

. . . the high power specialist

921 Louisville Rd. • Starkville, MS 39759

Technical Info.: (601) 323-8211 • **FAX:** (601) 323-6551

For a catalog or your nearest dealer:

Call Toll-Free 1-800-647-1800

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Other Information
continued

compiled from information taken from advanced registration and admission ticket stubs. The Post Office is now using a fully automated system for bulk mailing in the US, which requires accurate addressing and Zip+4. We process our mailing lists by computer to add the Zip+4 code and correct the spelling of Street and City names where possible. In spite of that, we were forced to discard more than 5000 addresses this year due to unreadable ticket stubs, or improper or incomplete address information.

By the time you read this, you have probably already deposited your ticket stub, but for next year, help us to get our mail to you. Check with your Post Office and use their standardized spelling, format and Zip+4.

Alternate Activities...

We welcome back everyone who has been to Hamvention and encourage new friends to join our activities! Hamvention general admission tickets are required for Alternate Activities and are available at Meadowdale High School on Saturday, as well as at Hara Arena. Free shuttle bus service is provided between the High School and Hara Arena.

Friday, April 24 1-5 P.M.

Make It & Take It, Room 3 at Hara Arena

Saturday, April 25 9 A.M. to 12:00 - 2-4 P.M.

Sunday, April 26 9 A.M. - 12 Noon

Meadowdale High School, See Listing on Page 55.

Luncheons at Meadowdale H.S. ($8.50 each)

Saturday, April 25 (Noon to 2:00 P.M.)

1/4 Baked Chicken,Au Gratin Potatoes, Green Beans
Garden Tossed Salad, Rolls, Muffins & Butter,
Cherry Cobbler with Whipped Cream, Coffee, Tea or Milk

Door Prize Drawings - Cafeteria following luncheon. You must be present to win. Luncheon ticket is used for prize drawing.

Sunday, April 26 (12:30 to 1:30 P.M)

Cup of Potato Soup with Grated Cheese,Bacon Bits and Chopped Green Onions, Whole Tomato Stuffed with Chicken Salad, Carrot and Celery Sticks,
Crackers, Assorted Mini Muffins & Butter,
Fruit Kabobs with Dip, Coffee, Tea or Milk

Door Prize Drawings - Cafeteria following luncheon. You must be present to win. Luncheon ticket is used for prize drawing.

1:30 P.M. Return to Hara Arena

Thanks for coming — see you next year!

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DISCOVER IT AT DAYTON. VISIT THE ANNUAL ATVQ FRIDAY NIGHT ATV PARTY 7 PM - MIDNIGHT AT THE HOLIDAY INN NORTH, WAGONER FORD ROAD AT I-75 OR VISIT OUR BOOTH # 339. MEET HUNDREDS OF ACTIVE VIDEO HAMS AS THEY DESCRIBE THEIR LATEST PROJECTS, DX AND FUN ADVENTURES. CAN'T MAKE IT TO THE PARTY? OUR ALL NEW BOOK, "ATV SECRETS FOR ASPIRING ATV'ERS" ONLY $9.95, SUBSCRIPTIONS TO THE BEST ATV MAGAZINES AVAILABLE AT OUR BOOTH.

ATVQ: THE QUALITY YOU EXPECT,
THE INFORMATION YOU WANT,
THE FUN YOU DESERVE!

ATVQ SUB: US $18/YR, $22 CANADA, $35 DX.
ATV SECRETS, ATV COMPENDIUM, SSTV HANDBOOK, $9.98 EACH OR $11.25 POST PAID

ALSO AGENTS FOR BATC, CQ-TV, VHF COMMUNICATIONS.
USA ONLY SUBS: CQ-TV $22/YR,
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708 298 2269, FAX 708 803 8994.

See us in Booth 339 We are a Hamvention Prize Donor

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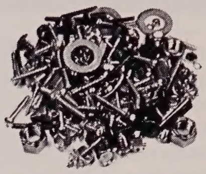
And Receive a
Set of Free Flag Decals!
$3.00 Value

Dayton Hamvention's
Largest Exhibitor!!

HARDWARE-HARDWARE-HARDWARE!

Assorted hardware.
Screws, nuts, bolts,
washers stainless,
copper, steel, machined
sheetmetal & wood!



$1.25 (per lb.)

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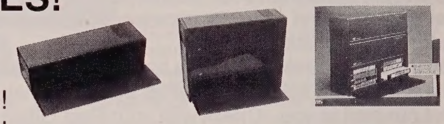
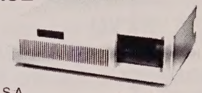


Starting at: $7.95

IBM PC/AT CASE



Genuine IBM Case
Full Size AT Case
Accepts Mini or
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Slide-off Top
8 Slot Frame. Made in U.S.A.
$35 ea.
Part No. 220-2759F

3 1/2" FLOPPY DISK DRIVE

Matsushita JU-253
Includes two 3.5"
Face Plates (Gray & Beige)
Comes with separate
5 1/4" Mounting Kit
$39 ea.
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IBM PS/2 CARRY CASE

Genuine IBM Product
Designed for PS/2 Model 25
Also works great with Macintosh +, SE
Removable casters & feet. Heavy duty
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Completely unzips for easy storage
Size 15" x 14" x 16"
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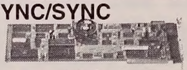
2400 BAUD ASYNC/SYNC MODEM



SYNC-UP(TM)2
by Universal Data Systems. Async 0-2400 Baud.
Synchronous 600-2400 Baud v.22 bis. Auto/Manual
Answer. AT Command Set. Async/Sync Dailer. Uses any
Async Modem Software. Must be set up as Com1 or Com2
Requires Special Software for Synchronous use.
(Not included)
$49 ea.
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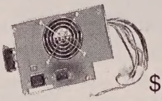
AT 1:1 FLOPPY/HARD DRIVE CONTROLLER

FAST MFM Interface. Controls
2 Floppy & 2 Hard Drives
IBM PC/AT 16 Bit Plug Compatible.(8 Mhz Buss Only.)
Can be used as second controller
$29 ea.
Part No. 220-3107F

AT 200 WATT SUPPLY



Factory Reburbished
Fits full size AT case
only.120/220V Input.
$35 ea.
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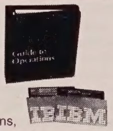
IBM PC/AT GUIDE TO OPERATIONS



An ideal getting started guide
for beginners. Complete with
Exploring The IBM Personal
Computer Software. Learn the basics:
keyboard commands, printer functions,
disk storage, dos, basic programming and
Funwriter a basic word processing package.
Includes IBM AT Diagnostics Disk.
(IBM #6280102) Retail ~~$80.00~~
$9.95 ea.
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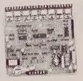
ALARM BOARD



Great experimenting board. 24 lug and
6 lug terminal strips, 8 relays, 8 slide
switches, over 30 ICs, 4 heatsinks, 2ft.
four conductor telephone line cord and
many other parts.
$3.95 ea.
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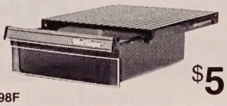
PLASTIC PARTS BOX



15"x14"x5"
Great for under
counter storage.
$5 ea.
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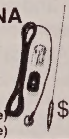
YAMAHA CARRYING CASE

Universal carrying case
for long flat obejects
like tennis rackets or
musical instruments.
Fits objects up to
3-5/8'(H) x 11"(W) x 26"(L).
$7.95 ea.
Part No. 650-0098F

ROOF MOUNT UHF MOBILE ANTENNA



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5dB Gain.
Complete with 14 ft.
of cable and PL-259
$15.95 ea.
Part No. 110-0027F(3/4" Hole)
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Automatic arming with armed
chirp. Automatic reset. Last
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instant activation. Status
indicator. Instant alarm circuit for hood and trunk.
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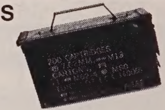
AMMO BOXES



Great storage boxes.
Heavy duty metal
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Water tight.

Available in two sizes: 11"L. x 7"H. x 4"D.
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STORE HOURS:
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Monday thru Saturday
Don't miss our Downtown Showroom while your visiting Dayton!
Prices good at Hamvention only.

Special Awards

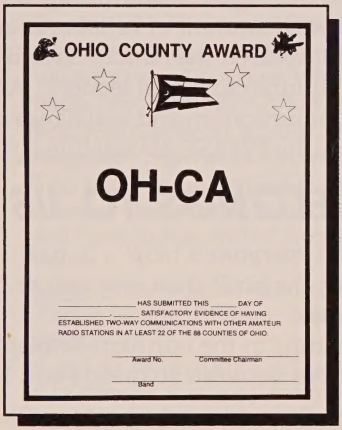
Ohio County Award ...

A special award is available for amateurs who make contact with Ohio counties.

RULES

1. Required contacts with 22 of the 88 counties, one must be Montgomery County. Additional endorsements will be given for 44, 66, and all 88 counties.
2. Contacts can be made on any Amateur band.
3. All modes - no contacts through repeaters or digipeaters.
4. Cards must be in possession and available upon request. Send log information with 2 General class or above signatures or an official of a National Level Radio Organization.
5. Send a 9"x12" SASE with log information (no QSL cards please) to:

OHIO COUNTY AWARD
Dayton Amateur Radio Association
P. O. Box 44
Dayton, Ohio 45401-0044



OHIO COUNTY AWARD

OH-CA

__________ HAS SUBMITTED THIS ______ DAY OF
__________, ______ SATISFACTORY EVIDENCE OF HAVING ESTABLISHED TWO-WAY COMMUNICATIONS WITH OTHER AMATEUR RADIO STATIONS IN AT LEAST 22 OF THE 88 COUNTIES OF OHIO.

Award No. ______ Committee Chairman ______

Band ______ ______

A Sincere Thanks

to j•Com for the use of their HamBase software to verify all questionable call signs and names.

See Booth # 129

Worked All Dayton Award ...

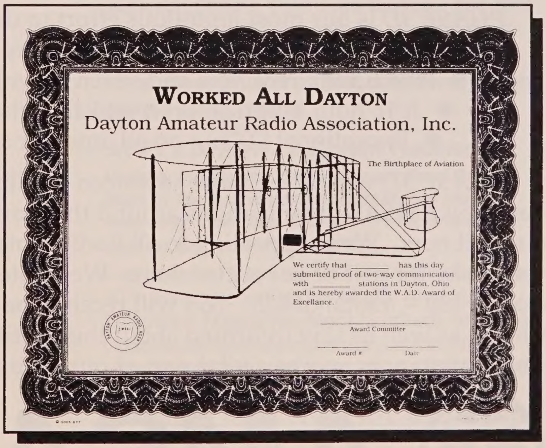
A special award is available for amateurs who make contact with Dayton, Ohio, or any of the following Ohio counties: Montgomery, Greene, Preble, Darke, Clark, Miami or Warren.

RULES

1. Contacts can be made on any Amateur band.
   All modes - no contacts through repeaters or digipeaters.

2. Required Contacts
   - A. Ohio Stations - 25 contacts
   - B. Continental U.S. stations (other than Ohio) 15 contacts
   - C. DX Stations - 10 contacts
3. Special Endorsements
   These contacts are to be made in addition to the required contacts (see #2)
   - A. W8BI Endorsement - Contact the Dayton Amateur Radio Association's Club Station, W8BI
   - B. YL Endorsement - Five YL contacts
   - C. Sister City Endorsement - Two contacts with either Auyer, Austria or Augsburg, Germany.
   - D. Double Extra Contacts Endorsement - Fifty additional contacts
   - E. Extra Contacts Endorsement - One hundred additional contacts
4. All contacts must be made after January 1, 1991.
5. Send log information (no QSL cards please) to:

Awards Manager
Dayton Amateur Radio Association
P. O. Box 44
Dayton, Ohio 45401-0044
USA



WORKED ALL DAYTON

Dayton Amateur Radio Association, Inc.

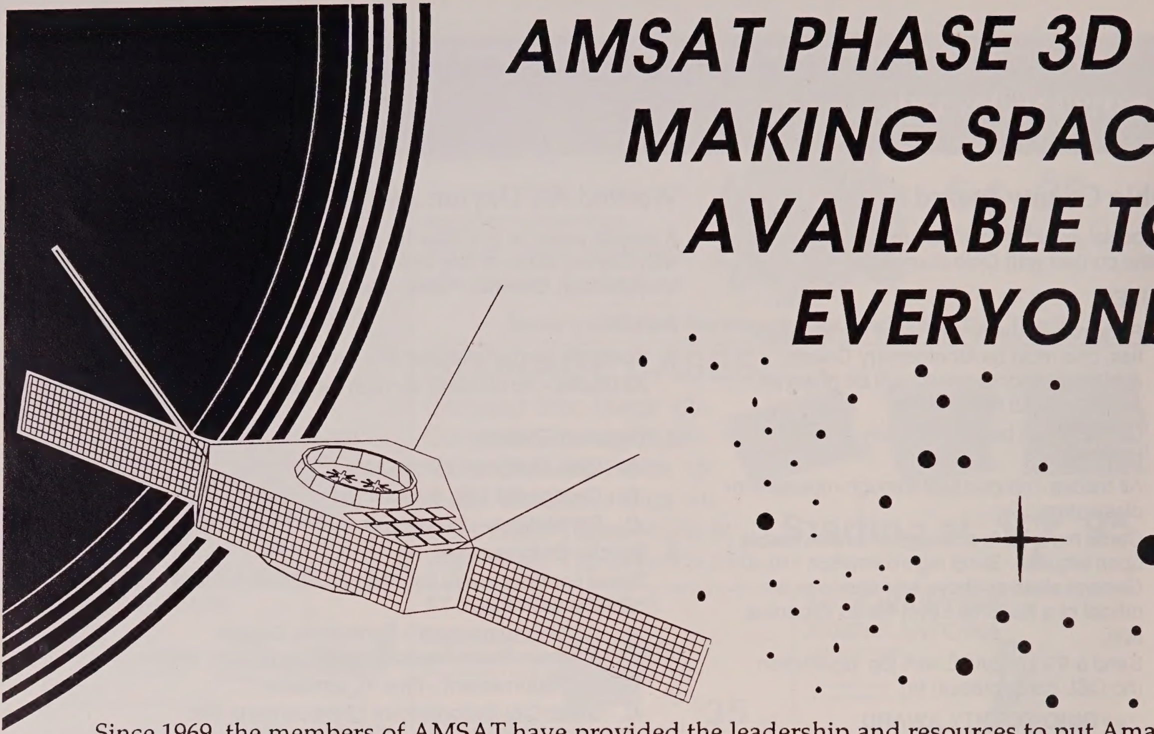
The Birthplace of Aviation

We certify that ________ has this day submitted proof of two-way communication with ________ stations in Dayton, Ohio and is hereby awarded the W.A.D. Award of Excellance.

Award Committee ______

Award # ______ Date ______

AMSAT PHASE 3D – MAKING SPACE AVAILABLE TO EVERYONE.



Since 1969, the members of AMSAT have provided the leadership and resources to put Amateur Radio in space and make it grow. This amazing over 20 year journey has resulted in 12 satellites with capabilities ranging from simple beacons to sophisticated communications transponders produced from design to launch by a growing international AMSAT organization with groups in 20 countries. As important, the work has resulted in an unprecedented amount of collaboration between citizens, industry and governments across the globe and increased the education and involvement of everyone in our journey into space, from school children to world leaders. AMSAT *is* the frontier of Amateur Radio and carries its spirit of global communication and assistance to an exciting new level – and now we are about to take the next step, the *PHASE 3D* satellite.

THE JOURNEY THROUGH SPACE BELONGS TO US ALL!

PHASE 3D is our most ambitious effort to date and we need *everyone's* help! It has:

- More spectrum, more modes and more ways to "get on the bird" than ever before.
- Five uplink receivers and seven downlink transmitters.
- A 16 hour elliptical orbit which is visible 70% of the time in the northern hemisphere.
- Exceptional DX'ing on all amateur satellite allocations between 10 meters and 10 GHz.

PHASE 3D will be the most advanced satellite we've ever built and launched – $4 million to be shared by *AMSAT* organizations around the world. Our share is $1.5 million and we need to start raising it now. We're appealing to all Radio Amateurs first; just $5 dollars from every active ham would pay for half of our entire share. We invite you to take it a step further by joining *AMSAT* for another $30 – a total of $35. You will receive the *AMSAT* journal all year plus numerous other benefits as well as stay informed about this cutting edge of Amateur Radio. Please send your contribution now and be a vital part of our exciting next step into space.

AMSAT

P.O. Box 27
Washington, D.C. 20044
(301) 589–6062, Fax: (301) 608–3410

See us in Booth 445,446,447,448

Unofficial Functions

Unofficial Friday Evening Functions

1800 — **7th Annual SPEC-COM Journal/USATVS Specialized Communications "Workshop" Sessions**

Ramada Inn North, 4079 Little York Road (Exit 60 on I-75). Walnut Meeting Room #1. New larger 300 seat Meeting Room facility!
Phone (513) 890-9500

Sponsored by the United States ATV Society, SPEC-COM Communications & Pub. Group and AEA, Inc.

No entrance fee. Refreshments available. Hotel's "Summerfields Restaurant" available for dinner. Prizes! Video Camcorders welcome. Talk-in on 144.340 MHz FM.

SESSION #1. Noted speakers on ATV, Earth Commercial TV Satellites, Weather Image Processing, Computer BBS's, AMTOR, Packet Radio and Clover Digital Communications.

5:00 Room open. Empire of Radio (PBS VCR Documentary on Early Radio - The Battle Between Marconi, DeForest & Sarnoff - 2 hours duration).

7:00 Welcome/Agenda

7:30 Ron Hranac N0IVN-First Dual Channel Stereo VSB ATV Transmission Experiments.

8:00 Gary Sanders, N8EMR, Mike Stone, WB0QCD and Bob Farrell, WB2COY, Ham Radio Telephone BBS's (DEMO's)!

8:30 Tom Glembocki, KO4BD, of WeatherSat Magazine - High Resolution WX Images.

9:00 Main Featured Speaker: "Uplinking Amateur Radio to the Stars!" Meet Jim Bass and Frank Collins, N6TAF, from Let's Talk Radio!

Note: *Entire program recorded for "Let's Talk Radio!" Satellite Program - Spacenet 3, Transponder 21.*

9:45 AEA PK-232MBX and IBM PC Weather-FAX Receive Systems (Literature Handouts).

10:00 Jerry Dahl of OFS WeatherFax-Computerized Weather Facsimile Reception & How To Get Started!

10:30 John Beanland, G3BVU, of Spectrum International: TimeStep (IBM PC Based) Weather Satellite System.

11:00 Bud Thompson N0IA: Advanced AMTOR, Packet Radio & Clover Updates.

12:00 ATV Night Owl DX'ers Attitude Adjustment Hour! Mah-Raj Pub

1830 — **Annual B*A*S*H (23rd Annual)**

Hara Arena Conference Center.

Hosted by the Miami Valley FM Association, co-sponsored by ICOM America. Free admission. Food and beverages available. Major prize drawings provided by Miami Valley FM Association and ICOM. The "Conference Center" entrance is next to the front entrance of Hara Arena and will remain open after the exhibits close. Join the fun and relax with the Miami Valley FM Association and ICOM America.

1830 — **QCWA-OOTC Banquet**

Neil's Heritage House in Dayton.

C.O.D. bar at 6:30 and dinner at 7:30, $16.00 per person. Advance reservations requested. QCWA membership is not required. Keynote speaker will be George Wilson, W4OYI, President of ARRL. Join the fun.

1830 — **DX Dinner (7th Annual)**

Stouffer's Center Plaza Hotel (across from the Dayton Convention Center). Displays and cash bar at 6:30, dinner at 7:00 P.M.

Sponsored by Southwest Ohio DX Association. Our featured speaker for the evening will be Tom Warren, K3TW. Bob Eslaire, W9UI, will be MC. Plan to attend a special presentation on Albania by Wayne Mills, N7NG. Advance reservations are required. Join us for a dinner with big guns and litle pistols, then visit the many DX hospitality suites in the hotel afterwards!

1900 — **Dayton Contest/DX Super Party**

Stouffer's Hotel, Miami Room (2nd Floor) Fifth & Jefferson Streets. Downtown Dayton. 224-0800.

Hosted by Frankford Radio Club and North Coast Contesters. Large Bar and Meeting Area. Meet DX and contest operators. Watch contest station videos.

1900 — **ATVQ ATV Party - A Dayton Tradition**

Holiday Inn North, 2301 Wagoner Ford Road. Meet in the spacious Grand Ballroom (seats over 300). Take Exit 57-B off of I-75, one block east on Wagoner Ford Road.

Discover it at Dayton. Visit the Annual ATVQ ATV party sponsored by ATVQ: Amateur Television Magazine. Meet hundreds of active video hams as they meet annually in the spacious Holiday Inn North Grand Ballroom to describe their latest projects, DX and fun adventures. Topics include ATV in Space, The

"We're Celebrating Our 10-Year Anniversary"

RC-96 Repeater Controller
acc advanced computer controls, inc
VOLUME
POWER COS CTCSS PTT LCOS LPTT PHONE DTMF PGM
RESET

And you can help celebrate by saving $$$ upgrading your repeater!

The Dayton authorities wouldn't approve the extravaganza celebration we planned for our 10th Anniversary. They were concerned about us disturbing the peace, keeping the city awake all night, and other things that are "frowned upon" in the state of Ohio. So we're partying in California instead!!! And we're passing our travel savings on to you as special Anniversary show prices!

- **RC-850 Repeater Controller** – the most sophisticated controller available anywhere. Loaded with unique capabilities, it's the icing on the cake for the very best systems – and that's where you'll find it!
- **RC-96** and **RC-85 Repeater Controllers** – for smaller budgets. Offer a frolicking blend of capability and simplicity. Now with scheduler and female speech!
- **Digital Voice Recorder** – brings voice mail and remotely recordable announcements to your repeater – to announce your parties!
- **FC-900 Interface** – makes building a romping multi-band remote base and linking system easy!
- **PatchMaster 200** – the ultimate home station simplex autopatch!

We're popping the corks and offering the biggest show discounts ever*. Call us at our special toll-free "800" number for details and to place your order. We'll be here partying during show hours and beyond. Have a ball this weekend, and we'll see you next year. Party on, dude!

Call us at 1-800-779-3311.

* Free party hat included with every order. Special prices valid ONLY from the start of the show through Friday, May 1, 1992.

acc advanced computer controls, inc.

2356 Walsh Avenue • Santa Clara, CA 95051 • (408) 727-3330 • fax: (408) 727-3413

Great SAREX ATV events; The sky WAS the limit!; ATV Adventures on the Road; Three band Mobile ATV Repeater, Surviving 33 megawatts ERP at your ATV repeater site; many more!

HOME BREW CONTEST - Winner receives $100 **CASH**. Bring your video/vhf/uhf projects, gadget, gizmo. Short descriptive write-up required. Too big to bring? Provide photos for consideration by the ATV audience judges. Enjoy an eyeball QSO, swap DX photos, stories. Bring your ATV equipment for on-air QSO's, several micro sized Watchie-Talkies will be on hand!

1930 — **SSTV Get-Together**

Holiday Inn North, 2301 Wagoner Ford Road

Tom Hibben, KB9MC, and Don Miller, W9NTP, will host. Latest developments in experimental SSTV will be presented and demonstrated. Everyone is invited to participate. Come early and stay late.

2000 —**Society of Midwest Contesters**

Hospitality Suite at the Stouffers Center Plaza (Across from Dayton Convention Center)

Refreshments and Entertainment. Everyone is Welcome!

2000 — **Western New York DX Association**

Hospitality Suite at the Stouffers Center Plaza Hotel in Suite 325.

Drop by for an eyeball with the Big Guns and Little Pistols. Everyone is welcome.

2000 — **FAROUT A.R.C. HOSPITALITY BLITZ**
(13th Annual)

New Location — K. of C. Party Room, 267 Bainbridge Street (just 3 blocks east of Stouffer's Hotel) Same location as 1990.

8:00 P.M. til 12 Midnight. Complimentary snacks and beverages. Listen 147.135 (Plus offset).

Unofficial Saturday Functions

1200— **Ex-G Radio Club Luncheon**

Alternate Activities Luncheon at the Meadowdale High School cafeteria.

Ex-G Radio Club members and guests should purchase tickets for the luncheon as registered attendees at the Hamvention.

1800 — **7th Annual SPEC-COM Journal/USATVS Specialized Communications "Workshop" Sessions**

SESSION #2 ***Ramada Inn North, 4079 Little York Road (Exit 60 on I-75). Walnut Meeting Room #1. New larger 300 seat Meeting Room facility! Phone (513) 890-9500***

Sponsored by the United States ATV Society, SPEC-COM Communications & Pub. Group and AEA, Inc.

No entrance fee. Refreshments available. Hotel's "Summerfields Restaurant" available for dinner. Prizes! Video Camcorders welcome. Talk-in on 144.340 MHz FM. ***Note:*** Entire program recorded for "Let's Talk Radio!" Satellite Program-Spacenet 3, Transponder 21. Noted speakers on ATV (AM&FM), ADV and OSCAR Satellites.

5:00 Room open. H.F. (Excellent, Italian made French Alps, Murder-Suspense, Ham Radio Movie - 2 hours).

7:00 Welcome/Agenda.

7:30 Dave Palaez, AH2AR-DARA W8BI, ATV Activities & Repeater.

8:00 Ron Hranac, N0IVN - Part 2: Using CATV Modulators for FSTV Transmit.

8:30 Dr. Al Chandler, K6RFK and Jim Newcomb, N7MBA of A.E.A., Inc - New Products, VSB Filtering & Amplifying

9:00 Main Featured Speaker: Part I: "The Future of HAM-TV Development - Amateur Digital Video (ADV) with Dr. John Champa, K8OCL of Detroit AMSAT Users Group- LIVE two-way demo of 9.6 kbps compressed digital CODEC telephone QSO! Equipment needed for HAM-TV use (plus VCR tape of other formats down to 64 KB).

9:30 Part 2. Using Compressed ADV Signals on the Upcoming AMSAT Phase 3-D OSCAR Satellite!

10:00 Dick Curtis, KK4HF of Marshall Space Flight Center ARC.

10:30 Steve Franklin WB5KGL of BESTLINK/ T.D. Systems: Better FSTV Video Quality & Sound.

12:00 ATV Night Owl DX'ers Breakfast

1900 — **Dayton Contest/DX Super Party**

Stouffer's Hotel, Miami Room (2nd Floor) Fifth & Jefferson Streets. Downtown Dayton. 224-0800.

Hosted by Frankford Radio Club and North Coast Contesters. Large Bar and Meeting Area. Meet DX and contest operators. Watch contest station videos.

AMATEUR
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ALLIE ATLAS AZDEN CLEGG COL-
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Designed specifically for amateur television in the 70cm band...

FL407 INTERDIGITAL FILTER

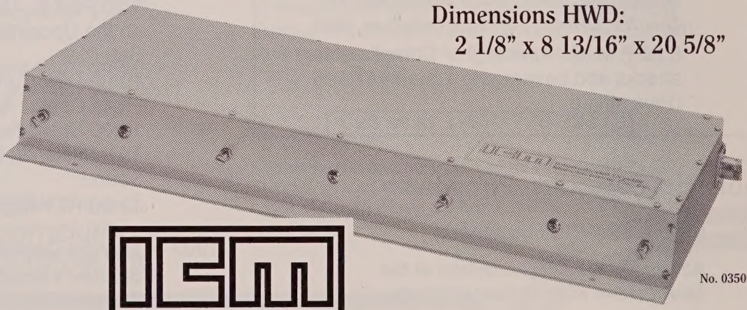
7-Pole Interdigital Vestigial Sideband Filter for Frequency Ranges of 420 MHz to 440 MHz

Ordering Information: The FL407 may be ordered on any frequency between 420 and 440 MHz. Please specify video carrier frequency when ordering.

Dimensions HWD:
2 1/8" x 8 13/16" x 20 5/8"

The 6 MHz nominal bandwidth and low loss design are perfect for transmitter or receiver use. Two filters can be used for repeater applications.

Heavy duty construction insures stable operation and long life.



No. 035026

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Unofficial Functions continued

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1992 DAYTON HAMVENTION

Committee Chairmen

GENERAL CHAIRMAN — Ross Brown, WA8DQH
ASST. GENERAL CHAIRMAN — Dave Grubb, KC8CF
DIRECTOR — Charlie Walker, N5EKU

Committees	
Advance Registration	Bill Jacobs, N8GSO
Advertising/Promotion	Dick Miller, N8CBU
Alternate Activities	Karen Lee, N8HRW
Arrangements	Charlie Olson, KD8YR
Awards/Hospitality	Barb Hillman, N8EYW
Banquet	Marty DeSimio,WB8MPF
Committee Services	Dave Hudson, KA8CZK
Communications	Joe Brassard, KA8OKC
DARA Booth	Lloyd Wendell, WA8LXW
DARA Van	Ron Moorefield, W8ILC
Exhibits	Ken Stoll, KB8GHV
Finance	Jim Bacher, WB8VSU
Flea Market	Bill McNabb, WD8SAY
Forums	Gary Des Combes, N8EMO
ACOUSTEK	Garry Matthews, KB8GOL

Committees	
Information & Office	Laura McNabb, N8OBC
Inside Security	Don Pagan, W8KWR
License Exams	Joe Gavin, KA8VMA
Management Information Systems	Jim Simpson, WB8QZZ
Media Relations	Noel McKeown, WB8QQC
Outside Security	Charlie Cotterman, KA8OQF
Prizes	Ken Allen, KB8KE
Publications	Mel Berman, W8GTR
Registration	Stan Kuck, NY8F
RF Carrier	Dave Morris, N8EEK
Talk-In	Garth and Joan Borton, WD8KZB & WD8KZA
Traffic	Dave Beam, WA8KZR
Transportation	Bill Markland, WB8UXZ
Treasurer	Sharon Brown, N8CZD

Past General Chairmen

1952-1955 — John J. Willig, W8ACE
1956-1957 — Rudy Plak, W8ZOF (W6TIK)
1958 — Frank J. Schwab, W8YCP (W8OK)
1959-1960 — Ed F. Bonnet, W8OVG
1961-1962 — Joseph H. McNutt, W8GFN
1963-1964 — Sheemon A. Wolfe, W8WJL
1965-1966 — Edgar A. Smith, W8RKL
1967 — Robert Wilcox, K8EJI
1968-1969 — Jack Ohmart, K8CUA
1970-1971 — Kenneth E. Mills, W8RLY
1972 — George L. Shearer, WA8IHC (KE8WJ)
1973-1976 — Ted L. Suarez, K8BSC
1977 — Wallace M. Wright, WA8ZCA (AD8N)
1978 — John Basilotto, WA8ZAN (KC2EH)
1979 — Sandford H. Cohen, W8JEZ (N8HWQ)
1980-1981 — Noel K. McKeown, WB8QQC
1982-1983 — Harold A. Judd, WA8KNM
1984-1985 — Jack Mitchell, AA8Q
1986-1987 — Jim Simpson, WB8QZZ
1988-1989 — Bill McNabb, WD8SAY
1990 — Ed Hillman, N8ALN
1991 — Ross Brown, WA8DQH

MODEL SG-230

ANY RIG — ANY ANTENNA
AUTOMATICALLY

SMARTUNER™

Let's get frank about HF antennas. Most hams try to put resonant antennas up for every band. For those with the room, great! But for the rest of us, limited to perhaps a single long wire or some other compromise antenna, the SGC SMARTUNER is the ideal solution. It's onboard computer selects exactly the right inductance and capacitance from more than one half million possible combinations. Then it remembers the setting so your rig will retune in 10 milliseconds. It's waterproof, too, built to exacting commercial and para-military standards. So, even if your antenna is a compromise, your signal doesn't have to be.

SGC Inc. SGC Building, 13737 S.E. 26th St. Bellevue, WA. 98005 USA
P.O. Box 3526, 98009. Telex: 328834. Fax: 206-746-6384. Tel: 206-746-6310

Air Force Museum

The world's largest aviation museum with 10 1/2 acres of aircraft and other exhibits under roof is a free attraction which is family oriented and includes over 200 airplanes such as the Sopwith Camel, the B52 and B1A bombers and the F117A Stealth Fighter, as well as the Apollo 15 capsule which circled the moon in 1971, plus more than 6,000 personal artifacts, documents, photographs and mementoes of Air Force history from the early 1900's. Free historical movies are shown daily in the museum's 500 seat auditorium. Also available for your convenience are an extensive gift shop, bookstore, cafe and picnic shelters. The newly opened IMAX Theatre will put you in the heart of the action (which the astronauts described as "the next best thing to being there"). Films shown are "The Dream is Alive" (the effect of being weightless with the astronauts) shown at 10,12 Noon, 2 and 4, (40 mins) and "To Fly" (the ecstacy of flight with the Blue Angels and a magnificent hot air balloon flight) shown at 11, 1, 3 and 5 p.m. (30 mins). Saturday only special Hamvention showing of "To Fly" at 6:00 p.m.

IMAX admissions are $4 Adults, Sr. Citizens $3.50, students $3 and ages 2 to 7, $2.00 Hours of operation are 9:00 A.M. to 5:00 P.M. daily. The Museum is also very accessible to those with disabilities.

Northeast of Dayton on Wright-Patterson Air Force Base
255-3284

Take I-75 to Exit 58. Take Needmore Road (Wright Brothers Parkway) east 6 miles to Springfield Pike exit. Turn right at the bottom of the ramp onto Springfield Pike. Museum is on the right.

Take I-70 to Exit 41 (SR 4). Take SR 4 south 6.5 miles to Harshman Road exit. Turn left at the bottom of the ramp onto Harshman Road (Wright Brothers Parkway) and travel 1 mile to Springfield Pike exit. Turn right at the bottom of the ramp onto Springfield Pike. Museum is on the right.

Aullwood Garden

Aullwood Garden is a 32 acre park which offers the visitor a walk through a lovely area of blooming plants in a wide variety of species and colors to please your senses. Open daily from 8:00 A.M. to 7:00 P.M. , the Gardens are located at 900 Aullwood Road which is close to the Englewood Reserve.

North of Dayton near Englewood Reserve. Take I-70 to Exit 29 (SR 48). Take SR 48 north to US 40. Turn right onto US 40 and cross the dam. Park in the Englewood Reserve parking lot at the east end of the dam. Be careful crossing the road and walk 200 yards down Aullwood Road, pass Aullwood Audubon Society, to Aullwood Gardens.

Aviation Trail/Wright Cycle Company

Aviation Trail /Wright Cycle Company welcomes you to Wright-Dunbar Village, the home of Orville and Wilbur Wright, the fathers of aviation, and Paul Laurence Dunbar, the poet who charmed the world with his lyric genius. As teenagers, the Wrights published the early poems and essays of Paul Laurence Dunbar, who was a classmate of Orville's and a friend to both brothers. Dunbar left this area behind as he gained national and world reknown. By 1900, Dunbar was a world figure whereas, outside of Dayton, only a handful of glider enthusiasts knew of the Wrights. Orville and Wilbur Wright began their careers as printers while still in school, but after graduation they entered the bicycle business and finally, aviation. You will be stepping directly into history as you walk upon the original floors where Orville & Wilbur did their planning and building. Exact replicas of the machinery used by the brothers is on the site, as well as original bicycles from that era. They had seven printing press businesses, five bicycle shops, and three buildings where they worked on the airplane.

Near downtown Dayton west of I-75. 443-0793. 10-4 Saturday, Noon to 4 Sunday. National Historical Landmark.

Take I-75 to Exit 53 A/B (Third Street). Take Third Street west over the river 0.5 mile to Williams Street. Turn left onto Williams Street. Wright Cycle Shop is one short block on the left.

Carillon Historical Park

CARILLON
HISTORICAL
PARK
DAYTON, OHIO

The Park will be opened especially for Hamvention visitors on Saturday, April 25, 1992 from 12:00 noon to 4:00 p.m. (A $1.00 donation is requested).

The Carillon Historical Park houses a unique collection of historical buildings and exhibits which tell the story of the development of Dayton and the Miami Valley. Among the most noteworthy in this collection are Wilbur and Orville Wright's first practical airplane, antique Dayton-made automobiles including a 1912 Cadillac first equipped with Charles F. Kettering's self-starter, a replica of the Wright Bicycle Shop, a Barney and Smith wooden railroad car, a functioning 1930 letter press Print Shop, a section of the Miami/Erie Canal and Dayton's first log building. The

THE JAPAN RADIO CO.

NRD-535

THE NEXT GENERATION IN HIGH-PERFORMANCE HF RECEIVERS

Once again JRC breaks new ground in shortwave receiver design. The new NRD-535 has all the features SWLs and amateurs have been waiting for. General coverage from 0.1 to 30 MHz in AM, USB, LSB, CW, RTTY, FAX and Narrow FM modes. Advanced ECSS operation for phase-lock AM reception. Variable bandwidth control (BWC). Tuning accuracy to 1 Hz possible with direct digital synthesis. 200 memory channels with scan and sweep operation. Triple Superheterodyne receiving system. Superb sensitivity, selectivity and image rejection. Dual-width noise blanker eliminates impulse noise. Squelch, RF Gain, Attenuator, AGC and Tone controls. Optional RTTY demodulator available. 24 hour clock/timer. Easy to read vacuum fluorescent display with digital S-meter. AC and DC operation. Plus the most comprehensive computer interface found on any radio to date. Call or write today for a full color brochure, price list and dealer information.

See Us At Dayton!

JRC *Japan Radio Co., Ltd.*

MAIN OFFICE: Akasaka Twin Tower (Main), Akasaka 2-chome, Minato-ku, Tokyo 107, JAPAN
Tel.: (03) 584-8836 Telex: 242-5420 JRCTOK J

IN U.S.A.: 430 Park Avenue (2nd Floor), New York, NY 10022
Tel.: (212) 355-1180 FAX: (212) 319-5227 Telex: 961114 JAPAN RADIO NYK

beautifully kept grounds with tree shaded areas are an enticement to picnickers. Pack a lunch and enjoy nature at its best. Plan time in your visit to see, and hear, the Carillon Tower which houses exposed bells which are played at different times throughout the day.

Just south of downtown Dayton. 2001 S. Patterson Blvd. 293-2841.

Take I-75 to Exit 51 (Edwin C. Moses Blvd). Take Edwin C. Moses Blvd. east 0.9 miles to Stewart Street. Turn right onto Stewart Street and cross the bridge. Turn right at end of the bridge onto Patterson Blvd. Carillon Park is 0.6 mile on the right.

Carriage Hill

SPRING ON THE FARM

The Park District's Carriage Hill Farm is a living historical farm recreating the lifestyle of a conservative farming family of the 1880's. Take part in many of the over 80 demonstrations at Spring on the Farm on Saturday, April 25 and Sunday, April 26 from 1-5 P.M. each day.

Stitch a quilt, wash on a washboard, make an herbal moth repellant, plant a pumpkin, shave a shingle, use a cross-cut saw, black a stove, try a drop spindle and take a hayride. This is your opportunity to hear the whistle as the steam engine powers a saw, see the furrows as the draft team pulls the sulky plow and taste funnel cakes, kettle-cooked beans and cornbread. Many craft items are for sale so you can take home a memory of the day you touched the past.

North of Dayton and I-70. 7860 Shull Road. 879-0461

A $1.00 donation is requested. Take I-70 to Exit 38 (SR 201). Take SR 201 north 0.5 mile to Shull Road. Turn right onto Shull Road and follow the signs.

Dayton Museum of Natural History

The newly renovated $4 million structure boasts many new attractions including a hands-on learning center for grade school through junior high, a physical science "Doing the Wave" display on wave phenomena, which includes demonstrations on light, objects, sounds, and radio waves, Bio-Ohio, Wild Ohio, a learning center for pre-schoolers, a computerized Digistar Planetarium which creates spectacular three dimensional effects, and a special exhibit which includes an audiovisual presentation in the Sun Room. Visit on Friday from 1 P.M. to 5 P.M., Saturday from 9 A.M. to 5 P.M.. and Sunday from 1 P.M. to 5 P.M. A nominal fee of $3.00 for adults, $1.50 for persons 3 - 16 years of age and $2.50 for Seniors is charged. The planetarium is an additional 75 cents per person. Children 2 and under are admitted free.

Just north of downtown Dayton. 2600 DeWeese Parkway. 275-7431

Take I-75 to Exit 58 (Needmore Road). Take Needmore Road 1.5 miles west to Riverside Drive. Turn left onto Riverside Drive and go 1.3 miles to Siebenthaler Avenue. Turn left onto Siebenthaler and cross the river. Immediately turn right onto DeWeese Parkway. The museum is 0.6 mile on the left.

Dayton Art Institute

Founded in 1919, the Dayton Art Institute opened at its current location in 1930. The Italian Renaissance building is listed on the National Register of Historic Places. The classic structure provides a unique home for internationally-known collections including the outstanding Art of Our Time contemporary collection, European and American paintings and scultpure, an exceptional Asian wing, and notable collections of decorative arts, textiles and graphic arts. Free concerts are held at the Renaissance Auditorium on Sunday afternoon at 3:30 P.M. This has been a tradition at the Institute for more than half a century. Wheelchairs are available. Elevators and ramps make all public areas of the Institute accessible to the handicapped.

Downtown Dayton west of I-75. Forest and W. Riverview Avenues. 223-2411 (recording). 233-5277. Tues - Sun Noon to 5 P.M.

Take I-75 Southbound to Exit 54A (Grand Avenue). At the second light, turn left onto Forest Avenue. Turn right onto Belmonte Park North to the parking lot on the right.

Take I-75 Northbound to Exit 53B (First St./Salem Avenue). Turn left at the light at the bottom of the ramp and cross the bridge. At the light at the end of the bridge, turn right onto Riverview Avenue. Go three blocks and turn left on Belmonte Park North. Turn right into the parking lot.

Cox Arboretum

Located on 164 acres, with 85 of those acres being cultivated and offering many trails for the hiking enthusiasts, along with an edible landscape garden offering demonstrations on plantings of nuts, fruits, herbs, vegetables and other plantings. You will also find a large array of bulbs in bloom, two large ponds where the ducks are eager to munch on bread cubes and the Visitor's Center has a display on horticulture presented by well known artists. The grounds are available to you from 8:00 a.m. until dusk, while the buildings are open on Sunday from 1:00 p.m. to 4:00 p.m.

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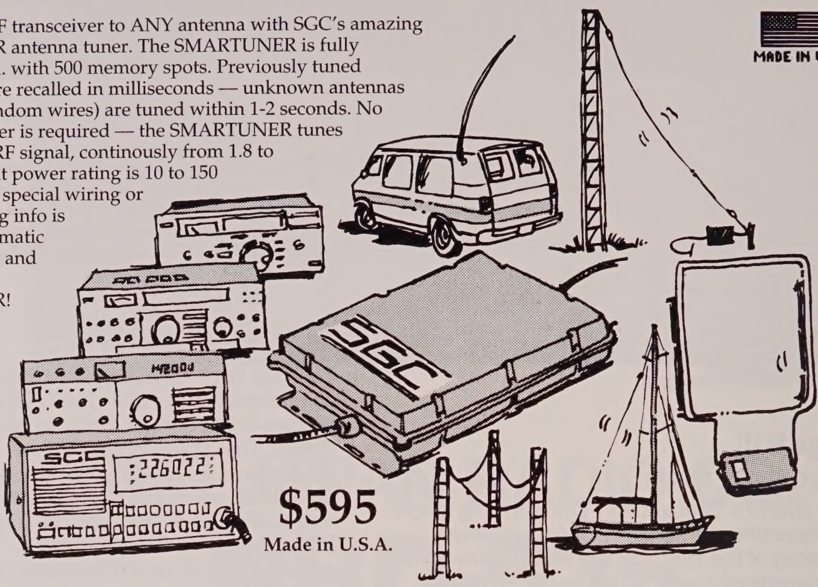
Tune ANY HF transceiver to ANY antenna with SGC's amazing SMARTUNER antenna tuner. The SMARTUNER is fully computerized. with 500 memory spots. Previously tuned frequencies are recalled in milliseconds — unknown antennas (including random wires) are tuned within 1-2 seconds. No constant carrier is required — the SMARTUNER tunes itself on any RF signal, continously from 1.8 to 30 MHz. Input power rating is 10 to 150 watts, and no special wiring or bandswitching info is needed. Automatic tuning is easy and fast, with the SMARTUNER!



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Introducing QMS™ — Quick Mount System

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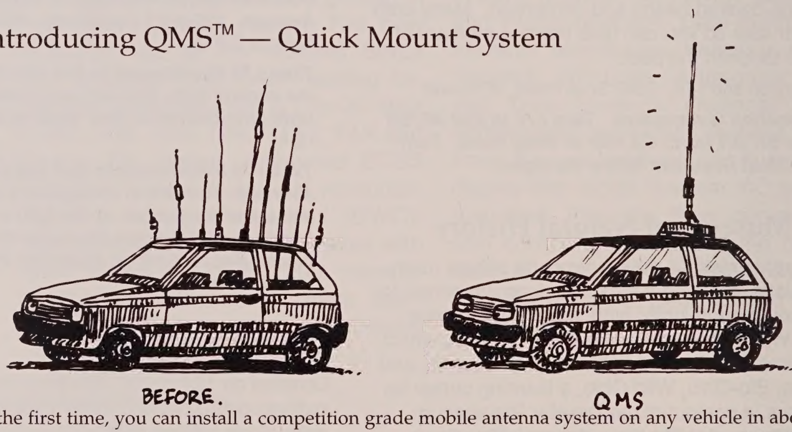

Now, for the first time, you can install a competition grade mobile antenna system on any vehicle in about 15 minutes — without drilling holes. SGC introduces QMS - Quick Mounting System - for mobile H.F. applications where portability and high performance are required. Designed for our commercial clients, QMS quickly mounts on any car, boat, van, RV or truck. Rated to speeds in excess of 70 MPH, QMS is a complete antenna solution for 1.8 - 30 MHz utilizing the legendary SGC-230 SMARTUNER™ automatic computer controlled antenna tuner, 9 ft. full coverage whip antenna and the waterproof QMS mounting system using straps and suction devices. Call for free information.

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See us in Booth 564-565 We are a Hamvention Prize Donor

South of Dayton near the Dayton Mall. 6733 Springboro Pike (SR 741). 434-9005

Take I-75 to Exit 44 (SR 725). Take SR 725 east 0.3 mile to SR 741 (Springboro Pike). Turn left onto SR 741. Cox Arboretum is 1 mile on the left.

Sunwatch

TWELFTH CENTURY INDIAN VILLAGE

800 years ago they waited and watched for the sun to rise behind the sacred pole and cast the long shadow. Only then would the time be right. Research over a period of 17 years has uncovered an amazing array of artifacts depicting the social life of the 12th century. Find out how the 800 year old lodges are reconstructed from archaeological evidence and visit the interior of a reconstructed lodge.

Near downtown Dayton west of I-75. 2301 West River Road. 268-8199. 9-5 Mon - Sat. Noon - 5 Sun.

Take I-75 to Exit 51 (Edwin C. Moses Blvd.). Take Edwin C. Moses Blvd/Nicholas Road west 1.3 miles to West River Road. Turn left onto West River Road. Sunwatch is 1.0 mile on the right.

Magnetic Resonance Exhibit

Some of the technological advancements which create miracles in today's modern medicine can be seen at a museum at Kettering Memorial Hospital. Magnetic Resonance is a diagnostic procedure of soft tissues which is performed by using Scanners, Channel 3 radio waves and a computer. No X-ray is involved. This procedure would be called upon to study parts of the body such as brain tissues, infarcts, tumors, missing items, pathological abnormalities, and spinal cords just to mention a few. The museum is open from 7:00 a.m. to 11:00 p.m. daily and is located on the ground floor of the hospital.

South of downtown Dayton at Kettering Hospital, ground floor. 3535 Southern Blvd. 298-4331

Take I-75 Northbound to Exit 50A. Turn right onto Springboro West. Go 0.5 miles to Northlawn Ave. Turn left onto Northlawn. Go 0.3 mile over the railroad track to Springboro Pike (SR 741). Turn left onto Springboro Pike. Go 0.25 mile to the stoplight at Dorothy Lane. Turn right onto Dorothy Lane. Go 1.5 mile to Southern Blvd. Turn right onto Southern Blvd. Go 0.6 mile to Kettering Memorial Hospital on the right.

Take I-75 Southbound to Exit 50B. Go south on SR 741 0.5 mile to the second stop light. Turn left onto Dorothy Lane. Go 1.5 mile to Southern Blvd. Turn right onto Southern Blvd. Go 0.6 mile to Kettering Memorial Hospital on the right.

Glen Helen/Clifton Mill/Ye' Old Tavern

YELLOW SPRINGS, OH.

Glen Helen Trails is a 1000 acre nature preserve located on the Antioch University College campus where you can enjoy a nature lodge, beautiful wildlife, vegetation and rock formations. Clifton Mill is a restored operating grain mill. Tours are available. Ye Old Tavern is a restored operating turn-of-the-century tavern. There are also many unique shops and restaurants in Yellow Springs.

South of Springfield at Yellow Springs and Clifton.

GLEN HELEN — Take I-70 east to Exit 52A (SR 68). Take SR 68 7 miles south to the first stoplight in Yellow Springs. Turn left and look for Glen Helen 2 1/2 blocks on the left.

YE' OLE TAVERN — Take I-70 east to Exit 52A (SR 68) Take SR 68 south 7 miles to Yellow Springs. Look for the Tavern.

CLIFTON MILL — Take I-70 east to Exit 54 (SR 72). Take SR 72 south 6 miles to Clifton. Look for signs to Clifton Mill.

International Women's Air & Space Museum

Woman's place in aviation started long before the so-called "women's movement" of recent years. In fact, did you know that Napoleon appointed a woman, *Madame Blanchard*, as his Chief Air Minister of ballooning in 1804. Katharine Wright, although not a pilot herself, was a very powerful force in the encouragement of the Wright Brothers' advancement in aviation. Over 15 years ago the idea of preserving the history of women in aviation was a dream. Since then memorabilia and historical artifacts have been collected, preserved and stored, making this initial dream a reality today. The museum is open to the public from 10 a.m. to 4 p.m. on Saturday.

South of Dayton and east of the Dayton Mall. 26 North Main Street, Centerville. 433-6766

Take I-75 to Exit 43 (I-675) . Take I-675 to Exit 4 (SR 48). Take SR 48 south 1.0 mile to the museum on the northeast corner of the intersection of SR 48 (Main Street) and SR 725 (Franklin Street).

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See us in Booth 170 &182

While You're Here (continued)

Voice of America Bethany Relay Station Tours

Tours of the Voice of America (VOA) international broadcasting facility will be offered on Sunday, April 26 at 2:00 P.M. only. Regrettably, Saturday tours are not available since most of the Relay Station staff will be at Hamvention. Duration of the tour will be about 45 minutes. It is preferred that groups of no more than 25 be formed so that tours can be conducted in the most efficient way.

VOA is located South of Dayton on I-75. At Tylersville Road (Exit 22), drive 1 mile east to the relay station.

Take Southbound I-75 to Tylersville Road (Exit 22).

Old Tippecanoe City Restoration Area

Whether you have an hour or a day, an interest in art, antiques and collectibles, or just enjoy shopping, Historic Tipp City is a must! This 1840's Miami-Erie Canal town offers hours of pleasure browsing the selections of over 50 antique dealers, 15 or more speciality shops in the renovated 1850's Old City Hotel, historical museum, art galleries and exhibits, and excellent dining opportunities.

You might want to stop first at the TIPPECANOE AND TYLER TOO! VISITORS CENTER at 12 E. Main Street where friendly folks will provide you with information on this town formerly called "Tippecanoe". As you browse the specialty shops in the Hotel Gallery, you'll be amazed at the size of the rooms compared to your current lodgings - no king-sized beds could fit these cozy spaces! You can revel in history as you sip coffee and join in the merriment in the Potter's House Cafe.

You'll also discover handcrafted reproductions, an old canal lock at Tipp Roller Mills, many other shops offering everything from pipes and a blending bar to over 50,000 gently used books. Historic Tipp City invites you to poke, prod and seek out the many interesting aspects of this unique community.

Take Northbound I-75 to Exit 68 (SR 571) at Tipp City. Turn onto SR 571 and go 1.0 mile east to the shops of Old Tippecanoe City.

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Come by and check out the latest technology from MFJ at our Booths 62-64 and 83-85!

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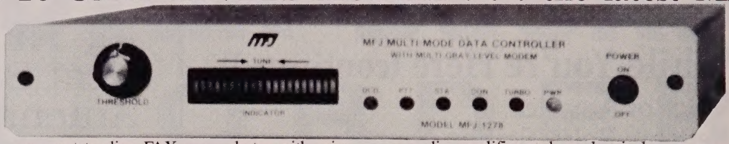
and *keeps on* bringing you state-of-the-art advances *NOW* with *FULL COLOR SSTV, COLOR FAX, and 16 GRAY LEVELS MODEM* . . . the latest MFJ breakthrough!



MFJ-1278 **$279 95**

No old stale technology at MFJ! **Using** the latest advances, MFJ brings you 9 exciting digital modes and *keeps on* bringing you state-of-the-art advances like ***color*** SSTV, ***color*** FAX, and ***16*** gray levels modem. **You** get tons of features other multi-modes just don't have.

Only MFJ gives you *all 9* modes

Count 'em -- you get 9 fun modes -- Packet, AMTOR, RTTY, ASCII, CW, FAX, SSTV, Navtex and Contest Memory Keyer.

You can't get all 9 modes in *any* competitive multi-mode. Nobody gives you modes MFJ-1278 doesn't have.

New Full Color SSTV and Color FAX

Enjoy the latest MFJ-1278 breakthrough — full color SSTV and color FAX display with an appropriate terminal program like MFJ-1289!

The best modem you can get

Tests in ***Packet Radio Magazine*** prove the modem used in the MFJ-1278 copies HF packet more accurately than all other modems tested.

MFJ-1278 is the *only* multi-mode with a ***true*** DCD circuit. This dramatically reduces sensitivity to noise and dramatically increases completed QSOs.

Exclusive Built in Printer Port

Only the MFJ-1278 has a print port that lets you plug in your Epson or IBM compatible printer. You don't need to buy a silly $40 cable just to plug in your printer.

20 LED Precision Tuning Indicator

MFJ's unequaled tuning indicator makes it really easy to work HF packet. Just tune your radio to center a single LED and you're precisely tuned in to within 10 Hz -- and you use it the same for all modes.

New Easy Mail™ Personal Mailbox

You get MFJ's new Easy Mail™ Personal Mailbox with soft-partitioned memory so you and your ham buddies can leave messages for each other 24 hours a day. Mailbox memory expandable to 128k.

16-Gray Level FAX/SSTV Modem

You'll see tomorrow's news today when you copy outstanding FAX news photos with crisp clear details. MFJ-1278 is the *only* multi-mode with a built-in 16-gray level modem. It lets you transmit and/or receive 16-gray level pictures with an appropriate terminal program.

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MFJ's new ASA automatically identifies HF packet, RTTY, ASCII and AMTOR signals. A quick "OK" command selects the mode!

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When you buy your MFJ-1278 *today,* you don't have to miss new modes and features that come out *tommorow.* **Why?** Because your MFJ-1278 comes with a coupon good for one ***free*** eprom upgrade exchange that'll add new features.

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Plus you get . . . 32K RAM, ***free*** AC power supply, Host Mode, KISS interface for TCP/IP and MSYS compatibility, fast throughput anti-collision technology, independent transmit level for each radio port, random code generator, lithium battery backup, RS-232 *and* TTL serial ports, socketed ICs, tune up command, peripheral I/O port, automatic serial numbering, programmable message memories, dual radio ports (*each* HF or VHF), CW paddle jack, audio amplifier and speaker jack so you can monitor CW sidetone, transmit and receive audio and packet connect bell, ***new*** fully integrated instruction manual with *Fast Start*™ booklet and more. 9½ x 9½ x 1½ inches.

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You get MFJ's one year No Matter What™ Guarantee.

That means we will repair or replace your MFJ multi-mode (at our option) *no matter what* happens to it for a year.

Others give you a 90 day*limited* warranty. What do you do *after* 90 days? Or before 90 days if *they* say, "Sorry, your *limited* warranty does not cover *that* problem?" Why take chances when MFJ gives you ***No Matter What*** protection for a full year?

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New MFJ MultiCom™ and MFJ TNC to Radio Cables . . . get you on the air fast!

MFJ Multicom™ programs are now available for IBM compatible, Macintosh, C-64/128, and Amiga. Also, MFJ is introducing pre-wired TNC to radio cables for most radios.

MFJ-1278T *Turbo* with *fast* 2400 baud modem

The *new MFJ-1278T* Turbo gives you *fast* 2400 baud packet -- *twice* the baud rate of any other multi-mode. By communicating faster you'll reduce chances for error, lessen congestion and more efficiently utilize our ham frequencies. You'll also get 1200/300 baud for compatibility with older TNCs.

The 2400 and 9600 baud modem are also available separately. Order MFJ-2400, $69.95, MFJ-9600, $109.95 for any MFJ and most other TNCs.

MFJ-1214 Multimode

MFJ-1214 **$149 95**

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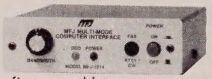
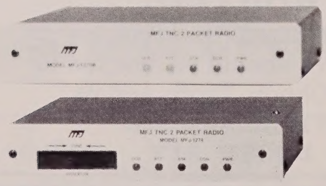


TNC's for VHF/HF Packet

***Now* with FREE MFJXER Terminal Program!**

A. MFJ-1270B **$139 95**

B. MFJ-1274 **$159 95**



A. MFJ-1270B super TAPR clone has a world wide reputation as *the most reliable TNC in the world!* Thousands used as digipeaters, nodes, BBS and in all kinds of commercial applications working 24 hours a day—many work for years without single failure. VHF and HF operation, Free AC power supply, free MFJXER terminal program, WeFAX gives weather map, mailbox expandable to 128K, easy upgrade to 2400 or 9600 baud, Host Mode, KISS interface. 1 year *No Matter What™* guarantee . Uses 12 VDC or 110 VAC. 9½x1½x7½.

B. MFJ-1274 sames as MFJ-1270B with 20 LED tuning indicator.

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MFJ-1289 **$59 95**

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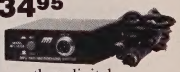
Bursting with features . . . One-Key Macros™ combine multiple keystrokes into a single touch, Call-Alert™ sounds an alarm when any characters you tell it to watch for come in, Auto-Set™ instantly switches entire stored sets of parameters, Auto-Router™ stores digipeater node routes for instant use, Packet Multi-Plex™ lets you transmit or receive a binary file and continue your QSO, Multi-Word™ gives a powerful word processor that is tailor-made for multi-mode communications.

Custom QSL created with paint program can be transmitted by FAX, SSTV or Packet. On-line help. RS-232 cable. Tons more.

TNC/Mic Switch...between TNC or mic by a push of a button

MFJ-1272B **$34 95**



You won't have to unplug your microphone and plug in your TNC or multimode data controller everytime you want to work packet or other digital modes. You won't need to wire up complicated cables just to use your TNC or multimode. Just plug the pre-wired cables into your rig's microphone connector and into your TNC/multimode and you're ready to go—no more hunting for hard-to-find connectors and trying to figure out the right pins to solder.

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FRIDAY FORUMS

1300 - 1445 AMSAT .... ROOM 1

Moderator: Mike Crisler, N4IFD
"AMSAT: Keeping Amateur Radio in Space", Bill Tynan, W3XO, AMSAT President
"SAREX, Mission Report and Plans", Frank Bauer, KA3HDO, VP Manned Space Programs
"Phase 3D, Amateur Radio's Greatest Challenge"

1300-1430 DEVELOPMENT TOOLS FOR THE ENGINEER .... ROOM 2

Moderator: Derick Moore, JDR Microdevices

1300-1645 PACKET RADIO .... ROOM 4

Moderator: Bob Neben, K9BL
Names/Topics not rec'd

1300 - 1645 ANTENNAS .... ROOM 5

Moderator: Tim Duffy, K3LR and Scott Jones, WR3G
"Large 10 Meter Antennas, Design, Construction and Applications",
John Brosnahan, W0UN
"Yagi Stacking Update and Beverage Antenna Applications",
Frank Donovan, W3LPL
"Some Additional Yagi Design Ideas Based on Computer Modeling",
Dr. James Breakall, WA3FET,
Pennsylvania State University
"Strengths and Weaknesses of Antennas",
Dr. David Leeson, W6QHS
"Yagis vs. Quads, Additional Data",
Carl Luetzelschwab, K9LA

1300 - 1500 INTERNATIONAL HUNGARIAN AMATEUR RADIO CLU ROOM7

Moderator: John Rozsa, VE3NKW
"Club Annual Meeting" Istvan Miskey, KE8J, President,
John Rozsa, VE3NKW, Executive Vice President
Robert Szule, N8HHE, Secretary,
Bela Banyasz, AD3C, Treasurer
Dr. Laszlo Radnay, W1PL, Past President
"First Hungarian Radio Amateurs", John Rozsa, VE3NKW, Jozsef Boer, K2DA
"International Network Systems", John Rozsa, VE3NKW

1400 - 1500 ELECTRICAL SAFETY DEMONSTRATION .... ROOM 6

Moderator: George Maurer and Tony Norman, Dayton Power & Light

1445-1530 QRP .... ROOM 2

Moderator: Rev. George Dobbs, G3RJV
Rev. George Dobbs and Doug DeMaw, W1FB "The Story of a Project"

1500-1645 COUNTY HUNTERS .... ROOM 1
Moderator: Billy Smith, Jr., W4HMV
Roger Lamothe, K8MDU

1515-1645 COLLINS USERS GROUP .... ROOM 7

Moderator: Bill Wheeler, K0DEW
Warren B. Bruene, W5OLY

1545 - 1645 USING THE SAREX PROGRAM IN THE CLASSROOM .... ROOM 2

Moderator: Carole Perry, WB2MGP

SATURDAY FORUMS

0900 -1300 DX .... ROOM 1

Moderators: Steve Bolia, N8BJQ and Mike Wren, K8NW
"DX Advisory Committee", Ted Pauck, K8NA
"DXCC Computerization", Thomas Hogerty, KC1J
"The Albania Project", Wayne Mills, N7NG
Charles Margelli, K7JA
Agim Muco, General Secretary, Albania P.T.T.
Albert Muller
Kan Mizoguchi, JA1BK
Vilho Flink, QH2BAZ
Martti Laine, QH2BH
"Fernando de Noronha Is", William Smith, W9VA, Andre C. Sampaio, PY0FF
"Effective QSLing", Don Daso, WA8MAZ
"South Sandwich 1992", Paul Dubson, W6MKB, Anthony De Prato, WA4JQS
"1992 Yasme Expedition", Mr. & Mrs. Lloyd Colvin, W6KG & W6QL

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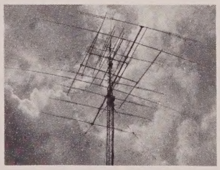
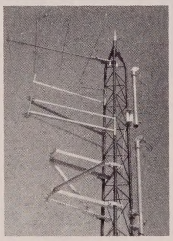

BG-18 Ladder Mast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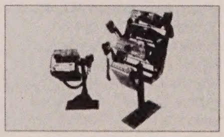
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- Print logbooks or QSL labels
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LOG-EQF is available as SHAREWARE. You can "test drive" LOG-EQF for just the price of a disk, then register it for only $25 after you've tried "the others". Registered Users receive the latest version, full technical support, and automatic notification of major updates. File import/export and DXCC tracking modules are also provided to registered users.

Look for LOG-EQF at your local shareware distributer or BBS, or send $5 (DX please add $3 shipping and handling) to the author for your shareware copy:

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0900 -1030 ARES .... ROOM 2

Moderator: Larry Solak, WD8MPV
"ARES and Our Image", David Kersten, N8AUH, Ohio Section Manager
"Clubs Need ARES", Joanne Solak, KJ30/8, Ohio Afffiliated Club Coordinator
"Ohio EMA and ARES", Mark Meadows, Ohio EMA

0900 -1100 WX SATELLITE .... ROOM 3

Moderator: Dave Latsch, N9MCE
"APT/GOES/HRPT Overview", Jeff Wallach, N5ITU
"Advanced Amateur HRPT", Ed Murashie
"Image Interpretation", John Williams, Dallas Remote Imaging Group
"Satellite Imaging Software", Dr. Tom Kelso
"Satellite Antennas", Charles Pocius, NJ9Y
"HRPT Software", Tracy Lenocker

0900 -1030 COMBINED MARS .... ROOM 4

Moderator: Robert L. Sutton, AAA9A, Chief, Army MARS
Lt. General Peter A. Kind, Commander, U. S. Army Information Systems Command
H. Ray Collins, AGA3C, Chief, Air Force MARS
Robert D. Loe, Chief, Navy-Marine Corps MARS

0900 - 1230 VHF/UHF FORUM .... ROOM 5

Moderator: Joe Burke, WA8OGS
"VHF/UHF Beacons - Good Propagation Indicators", Dave Meier, N4NM
"Eastern VHF/UHF Conference Highlights", Tom Kirby, W1EJ
"The World Above 50 MHZ- A New Contest", Bill Tynan, W3XO
"Central States VHF Conference - An Overview", Bill Tynan, W3XO
"Microwave Yagi Antennas", Roger Cox, WB0DGF
"Microwave Update '92 Highlights", Dave Halliday, KD5RO
"Amateur Radio Astonomy at VHF/UHF", Dr. Bill Lonc, VE1SMU

0900-0945 GROUND COOPERATIVE ANTENNA SYSTEMS .... ROOM 7

Moderator: Larry Driskill, KC7AU and Dave Martin, WA7FFM
IVIE Technologies, Inc.

1000 - 1100 ELECTRICAL SAFETY DEMONSTRATION .... ROOM 6

Moderator: George Maurer and Tony Norman, Dayton Power & Light

1000 - 1045 GERITOL NET .... ROOM 7

Moderator: Phil Pritchett, WD5P

1045 - 1130 OSSBN .... ROOM 2

Moderator: Charles Burke, K8JDI, OSSBN Net Manager

Join the ham radio accessories party at the MFJ booths!

MFJ-949D Deluxe 300 Watt Tuner covers 1.8-30 MHz . . . plus you get peak reading meter, dummy load, antenna switch and balun for . . . $149.95

More hams use the MFJ- 949D than any other tuner in ham radio.

Why? Because no other 300 watt tuner gives you this combination of features and value

The MFJ-949D gives you a highly developed product with years of proven reliability and a reputation for being able to match about anything.

A lighted peak reading cross-needle meter shows you SWR, forward and reflected power. A 6-position antenna switch lets you select 2 coax lines (direct or thru tuner), random wire or balanced line and built-in dummy load. You also get a 4:1 balun for balanced line and 1.8-30 MHz coverage.

MFJ-949D

$149.95

Hard-earned reputation

There's just no shortcut. MFJ is the most trusted name in the business. More hams trust MFJ tuners than all other tuners combined.

Proven Reliability

MFJ has made more tuners for more years than anyone else. With the MFJ-949D, you get a highly devloped tuner with proven reliability.

Made in USA

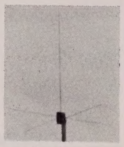
The MFJ-949D is made in USA. We're not an importer sending your money to a foreign country.

Your Very Best Value

The MFJ-949D gives you your very best value -- first-rate performance, proven reliability and the best guarantee in ham radio -- all from the most trusted name in antenna tuners. Don't settle for a copy-cat when you can own an MFJ original. Get yours today!

MFJ 5/8 Wave Ground Plane

MFJ-1750 **$19.95**



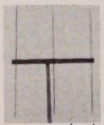
You get a 300 watt 5/8 wave ground plane home antenna for 2 Meters that gives you the maximum possible calculated gain of any single element antenna. Shunt fed matching network for lowest possible SWR over the entire 2 Meter band. Plus it bleeds off unwanted static. Rapid-Tune-Radiator™, ceramic insulator, easy installation to any 1'' or 1½'' mast with single U-bolt.

Improved 1/4 wave ground plane

MFJ-1740 **$12.95**

You get an improved 300 watt 1/4 wave ground plane for 2 Meters that'll bring up repeaters as well as or better than any 1/4 wave ground plane—even if it cost twice as much.

Portable 3 element beam for 2 Meters



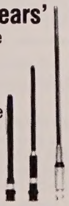
MFJ-1763 **$39.95**

MFJ's new portable 3 element beam for 2 Meters. Its unique design lets you set it up or take it down in seconds! Elements simply screw into the boom. It's easy to store and sturdy enough to use as your home station antenna.

Center, vertical and horizontal or end fed mount. Compact 2¾ foot boom gives you a calculated gain within 1dB of a four element Yagi. Lightweight aluminum, 2 lbs., easy mount to mast or tower leg.

MFJ-1730, Pocket Roll-Up, $14.95, 2 meter ½ wave vertical roll-up perfect for traveling.

MFJ 'Pocket Linears'

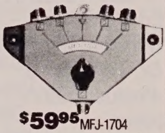


MFJ-1710, $9.95. 3/8 wave 2 Meter. Pocket clip.
MFJ-1712, $14.95. Dual band. ¼ wave 2 meters **and** 5/8 wave 440 MHz.
MFJ-1714, $16.95. ½ wave 2 Meters. Significant gain over **any** rubber ducky. Halfwave dipole is shorter and lighter than 5/8 wave with more gain and less stress on rig.
MFJ-1724, $19.95 (not pictured) Triband mobile for 144, 220 and 440.

MFJ Coax Antenna Switches

$34.95 MFJ-1701

$21.95 MFJ-1702B



$59.95 MFJ-1704

Select any of several antennas from your operating desk with these MFJ Coax Switches. They feature mounting holes and automatic grounding of unused terminals. They come with MFJ's one year **unconditional** guarantee.
MFJ-1701, $34.95. Six position HF antenna switch. SO-239 connectors. 50-75 ohm loads. 2 KW PEP, 1 KW CW. Black alum. cabinet. 10x3x1½ in.
MFJ-1702B, $21.95. 2 positions plus new Center Ground. 2.5 KW PEP, 1 KW CW. Insertion loss below .2 dB. 50 dB isolation at 450 MHz. 50 ohm. 3x2x2 in.
MFJ-1704, $59.95. 4 position cavity switch with lightening/surge protection device. Center ground. 2.5 KW PEP, 1 KW CW. Low SWR. Isolation better than 50 dB at 500 MHz. Negligible loss. 50 ohm. 6¼x4¼x1¼ in.

MFJ Dry/Wet Dummy Loads

A.

MFJ-260B **$28.95**

MFJ-264 **$64.95**

B.

C. MFJ-250 **$49.95**

MFJ has a full line of dummy loads to suit your needs. Use a dummy load for tuning to reduce needless (and illegal) QRM and save your finals.
A. MFJ-260B, $28.95. VHF/HF. Air cooled, non-inductive 50 ohm resistor. SO-239 connector. Handles 300 Watts. Run full load for 30 seconds, derating curve to 5 minutes. SWR less than 1.3:1 to 30 MHz, 1.5:1 to 150 MHz. 2½x2½x7 in.
B. MFJ-264, $64.95. UHF/VHF/HF 1.5 KW load. Low SWR to 650 MHz. Run 100 watts continuously, 1500 watts for 10 seconds. SWR is 1.1:1 to 30 MHz, below 1.3:1 to 650 MHz. 3x3x7 inches.
C. MFJ-250 1KW Dummy Load, $49.95, 50 ohm oil-filled. Low VSWR-400 MHz, 1KW CW or 2 KW PEP for 10 min. ½ KW for 20 min.; with oil. 7½x6-5/8. **MFJ-250X,** $29.95, with oil.

MFJ-701 RFI Free Choke Kit (Package of 4)

MFJ-701 **$14.95**

MFJ-701 RFI Free Choke Kit makes it easy to eliminate common RFI problems. You simply wind the offending cable around MFJ's RFI suppressing toroid to get rid of RFI. Four square ferrite toriods formulated especially for eliminating RFI from .5 to 200 MHz. Each toriod separates into halves to make it easy to wind on all kinds of cables.

W9INN Balun Box

MFJ-912 **$39.95**

MFJ-912 permits using coax from your T-network tuner to Balun Box mounted outside. Provides function of internal balun but is mounted outside.

MFJ Low Pass Filter

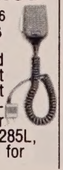
MFJ-704 **$39.95**

MFJ-704 Low Pass Filter handles full legal power. Reduces TVI caused by harmonics in the TV bands. 1.8-30 MHz. 52 ohm. Low insertion loss.

MFJ Mini and Compact Speaker Mics

MFJ-285/287 **$24.95**

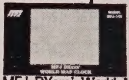
MFJ-284/286 **$24.95**



These new MFJ speaker/mics give you everything -- first rate electret mic element and wide range speaker for superb audio on **both** transmit and receive, earphone jack, PTT, pocket clip, lightweight retractable cord and one year guarantee -- and you get it all in a **tiny** mini 2 x 1¼ x ¼ inch package or compact 1¼''x2''x3''. Regular or ''L'' shaped connector available. *Come by* and try our Mini Mics: MFJ-283, MFJ-285, 285L, 285W, MFJ-287, 287L and our Compact Mics: MFJ-284 or 286 for ICOM, Yaesu, Alinco, Kenwood and others.

DXers' World Map Clock

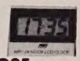
MFJ-110 **$24.95**



This new MFJ DXers' World Map Clock not only shows you the time at any QTH throughout the world – it also gives you an attractive world map so you can see the place where your contact is. Also shows day of week, moth, date and year. It's the neatest logging clock around. Alarm.

12/24 Hour Clocks

$19.95 MFJ-108B



$9.95 MFJ-107B

Huge 5/8 inch bold LCD digits let you see the time from anywhere in your shack. Choose from the dual clock that has UTC and local display or the single 24 hour ham clock.

Mounted in brushed aluminum frame. Easy set. The world's most popular logging clocks. MFJ-108B 4½x1x2;MFJ-107B 2¼x1x2 in.

Deluxe CW Practice Oscillator

MFJ-557 **$24.95**

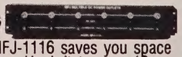
MFJ Deluxe Code Practice Oscillator has a Morse key and oscillator mounted together on a heavy steel base so it stays put on your table. Portable because it runs on a 9-volt battery (not included) or an AC adapter ($12.95) that plugs into a jack on the side.

Earphone jack for private practice, tone and volume controls for wide range. Speaker. Key can be hooked to transmitter. 8½x2¼x3¾.

Multiple DC Outlet

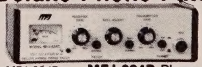
MFJ-1116 **$44.95**

MFJ-1112 **$29.95**



New MFJ-1116 saves you space **and** money. Hook it to your 12 VDC power supply and get 8 DC outlets for connecting your accessories. RF bypassing, keeps RF out of power supply from DC line outlet. 13½x2¾x2½ in. **MFJ-1112**, like MFJ-1116 but without ON/OFF switch, voltmeter, and fuse. Has 6 outlets pairs.

Deluxe Phone Patch



MFJ-624D **$69.95**

MFJ-624D Phone Patch gives you crisp, clear hum-free audio. Prewired for Kenwood, Icom and Yaesu rigs with 8 pin mic connectors. Use VOX or PTT. RF pi-filters, PC board construction eliminate RF feedback.

MFJ ENTERPRISES, INC. P.O. Box
(601) 323-5869; **FAX:** (601) 323-

Dayton Booths:

MFJ SWR Analyzers

MFJ's newest SWR Anaylzer™ has built-in 10 digit LCD frequency counter—makes reading SWR easier than ever.

MFJ-247 **$189.95**

MFJ's innovative new HF or VHF SWR Analyzers give you a complete picture of your antenna SWR over an entire band -- without a transmitter, SWR meter or any other equipment.

Simply plug your antenna into the coax connector, set your, SWR Analyzer to the frequency you want and read your SWR. You can instantly find your antenna's true resonant frequency, something a noise bridge can't do. You can monitor SWR changes as you adjust your beam or vertical – you'll know right away which way to adjust it.

You can shorten or lengthen your dipole and see the effects immediately. Battery operated and handheld sized so you can take them right to your antenna. They make it sooooo easy to work on your antenna until it's just the way you want it.

You can see how your SWR varies over an entire band and quickly find your usable 2:1 SWR bandwidth. You can check the SWR of the input to your amplifier.

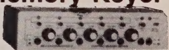
You get a super value because several instruments are combined

MFJ Keyer/Paddle

MFJ-422B **$134.95**

Deluxe MFJ Keyer/Bencher paddle combo makes a small, attractive unit. Iambic keying, adjustable weight, tone, front panel volume, speed controls, dot-dash memories, sidetone, speaker and auto. or semi-auto/tune modes. Use 9 V battery or 110 VAC with MFJ-1305, $12.95. For Keyer to mount on your Bencher paddle, order MFJ-422BX, $79.95.

Memory Keyer



MFJ-486 **$189.95**

MFJ Contest Memory Keyer gives you 8000 characters, soft-partitioned memories, CW Word Processor™, Custom Speed™ control, built-in three step CW course, auto. serial numbering, auto. message repeat, A or B keying, manual or automatic word spacing, speaker, earphone jack, and front panel controls for speed, volume, tone, weight and delay. Tune button and more. 9x2½x6 in.

Remote MFJ-77, $19.95. Use 12-15 VDC or 110 VAC with MFJ-1312, $12.95.

Making quality affordable during the 1992 Hamvention

494, Mississippi State, MS 39762
6551; Toll-free 1-800-647-1800

62-64, 83-85

MFJ-207 $\$99^{95}$

MFJ-208 $\$89^{95}$

into a single unit. It has a low distortion RF generator, SWR bridge with forward and reflected components, and a computing circuit that automatically computes your SWR and displays it on the meter. 4x1¾x7½.

MFJ-207, $99.95, covers 1.8-30 MHz.7½x2½x2¼

MFJ-208, $89.95, covers 2 meters.

MFJ-217 covers 30-50 MHz; **MFJ-218** covers 150-170 MHz. Only $149.94 each.

MFJ-346 $\$189^{95}$

MFJ-346, 600 MHz 10 digit LCD frequency counter, a perfect companion for **MFJ's** SWR Analyzer and Antenna Bridge.

MFJ Keyers

MFJ-401B $\$49^{95}$

MFJ-401B based on the proven Curtis 8044ABM IC Keyer chip lets you send iambic, auto., semi-auto. or manual with your squeeze, single-lever or straight key. Dot-dash memories, self-completing dots and dashes, jam-proof spacing, instant start, RF proof, 8-50 wpm, solid state keying. 9 V battery or 110 VAC with MFJ 1305, $12.95. 4x2x3½.

MFJ-407B $\$69^{95}$

MFJ-407B same as MFJ-401B except with A or B keying and with external controls. 7x2x6.

MFJ Tunable Filter

MFJ-752C $\$99^{95}$

This **all** mode **dual** tunable filter lets you zero in and pull out your favorite stations **and** notch out interferance. Independently tunable filters let you peak, notch, low or high pass signals to eliminate heterodynes and interference. Filters tune 300 to 3000 Hz with variable bandwidth from 40 Hz to almost flat. Select 2 receivers. Speaker jack. 9-18 VDC or 110 VAC with MFJ-1312, $12.95.

Here is the finest 3 KW Tuner money can buy with roller inductor, dummy load, new peak reading meter, antenna switch, balun plus more ... $349.95

The MFJ-989C is not for everyone. And not everyone can afford it.

However, if you do make the investment you get the finest 3 KW PEP tuner money can buy -- one that will give you a lifetime of use, one that takes the fear out of high power operation and one that lets you get your SWR down to absolute minimum.

The MFJ-989C is a compact 3 KW PEP roller inductor tuner with a lighted **peak** and average reading dual range Cross-needle SWR/Wattmeter.

With three continuously variable components - two massive 6 KV capacitors and a high inductance roller inductor - you get precise control over SWR and the widest matching range possible. It covers 1.8 to 30 MHz.

MFJ-989C $\$349^{95}$

You get a **new** lighted **peak** and average reading Cross-needle SWR/Wattmeter.

You get a giant two core balun wound with teflon wire for balanced lines and a 6-position antenna switch with extra-heavy switch contacts.

The compact 10¾ x 4½ x 15 inch cabinet fits right into your station.

You get a 50 ohm 300 watt dummy load for tuning your exciter, a tilt stand for easy viewing and a 3 digits turns counter plus a spinner knob for precise inductance control.

Add $10 s/h.

2-Knob Differential-T™ Tuner

The new MFJ-986 Differential-T™ 2-knob tuner uses a differential capacitor to make tuning foolproof and easier than ever. It ends constant retuning with broadband coverage and gives you minimum SWR at only **one** best setting. It covers 1.8-30 MHz.

MFJ-986 $\$289^{95}$

The roller-inductor lets you get your SWR down to absolute minimum. Current balun. The 3-digit turns counter lets you quickly return to your favorite frequency.

You get MFJ's new **peak** and average reading Cross-needle SWR/Wattmeter for accurate readings over a wider frequency range. It reads forward/reflected power in 200/50 and 2000/500 watt ranges. Meter lamp uses 12 VDC or 110 VAC with MFJ-1312, $12.95. (Add $10 s/h).

MFJ's Super Value Tuner

MFJ-941E $\$109^{95}$

The new MFJ-941E gives you a 300 watt PEP tuner that covers everything from 1.8-30 MHz -- plus you get a cross-needle meter, antenna switch and balun . . . for an incredible $109.95. Meter lamp uses 12 VDC or 110 VAC with MFJ-1312, $12.95.

Antenna switch selects two coax lines (direct or thru tuner), random wire, balanced line or external dummy load. 4:1 balun. 1000 volt capacitors. Measures 10-5/8''x2-7/8''x7'.

MFJ-941E lets you tune out SWR on dipoles, beams, inverted vees, verticals, mobile whips, random wires, balanced lines and coax antennas. Pick yours up today. You'll be glad you did.

MFJ Artificial RF Ground

MFJ-931 $\$79^{95}$

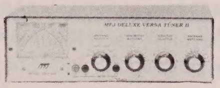
You can create an artificial RF ground and eliminate RF "bites", feedback, TVI and RFI when you let the MFJ-931 resonate a random length of wire and turn it into a tuned counterpoise. MFJ-931 also lets you electrically place a far away RF ground directly at your rig -- no matter how far away it is -- by tuning out the reactance of your ground connection wire. 7½x3½x7 in.

MFJ's Random Wire Tuner

MFJ-16010 $\$39^{95}$

You can operate all bands anywhere with any transceiver when you let the MFJ-16010 turn any random wire into a transmitting antenna. Great for apartment, motel, camping operation. Install a wire anywhere! Covers 1.8-30 MHz. 200 watts PEP. Ultra small 2x3x4 in.

MFJ's New 300 Watt Tuner



MFJ-948 $\$129^{95}$

If you don't need a dummy load but want all the other features of the MFJ-949D, then choose the MFJ-948.

The MFJ-948 features a **peak** reading **lighted** cross-needle meter with built-in lamp switch, one year unconditional guarantee and is made here in the USA. Get yours today for only . . . $129.95.

MFJ Cross-needle Mobile Tuner

MFJ-945D $\$89^{95}$

Don't leave home without this **mobile** tuner! Have an uninterrupted trip as the MFJ-945D extends your antenna bandwidth so you don't have to stop, go outside and adjust your mobile whip.

You can operate anywhere in a band and get low SWR. You'll get maximum power out of your solid state or tube rig and it'll run cooler and last longer.

Small 8 x 2 x 6 inches uses little room. Cross-needle SWR/ Wattmeter and convenient placement of controls makes tuning fast and easy while in motion. 300 watts PEP output. Efficient airwound inductor. 1000 volt capacitors. Mobile mount, MFJ-20, $3.00.

MFJ VHF or UHF Tuners

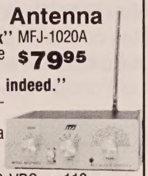
MFJ-921 $\$69^{95}$

MFJ-921 tuner covers both 2 Meters and the 220 MHz bands. **MFJ-924** covers 440 MHz. Built-in **SWR/Wattmeter.** 8 x 2½ x 3 in. 2-knob tuning convenient for mobile or base.

MFJ Indoor Active Antenna

MFJ-1020A $\$79^{95}$

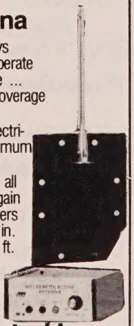
"World Radio TV Handbook" says MFJ-1020 is a "fine value ... fair price ... best offering to date ... **performs very well indeed."**



Tuned circuitry minimizes intermod.,improves selectivity. Use as preselector with ext antenna 0.23-30 MHz. **Controls:** Tune, Band, Gain, On/Off/Bypass. 6x2x6 in. Use 9V battery, 9-18 VDC or 110 VAC with MFJ-1312, $12.95

Super Active Antenna

"World Radio TV Handbook" says MFJ-1024 is a "first rate easy-to-operate ... quiet ... excellent dynamic range ... good gain ... low noise ... broad coverage ... excellent choice."



Mount it outdoors away from electrical noise for maximum signal, minimum noise. Covers 0.5-30 MHz.

Receives strong, clear signals from all over the world. 20 dB attenuator, gain control. On LED. Switch two receivers and aux. or active antenna. 6x3x5 in. Remote unit has 54 inch whip, 50 ft. coax and connector. 3x2x4 in. Use 12 VDC or 110 VAC with MFJ-1312,$12.95.

MFJ-1024 $\$129^{95}$

MFJ products are backed by our

ONE YEAR GUARANTEE

MFJ Versatile 1.5 KW Tuner

MFJ-962C $\$229^{95}$

MFJ-962C lets you use your barefoot rig now and have the capacity to **add** a 1.5 KW PEP amplifier **later.** Covers 1.8-30 MHz.

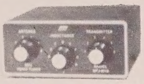
You get two husky continuously variable capacitors for maximum power/minimum SWR. Lots of inductance gives you a wide matching range.

You get MFJ's **new peak** and average reading Cross-needle SWR/Wattmeter with a **new** directional coupler for more accurate readings over a wider frequency range. It reads forward/reflected power in 200/50 and 2000/500 watt ranges. Meter lamp uses 12 VDC or 110 VAC with MFJ-1312, $12.95.

Plus . . . 6-position antenna switch and teflon wound balun with ceramic feedthru insulators for balanced lines. 10¾ x 4½ x 15 in. $10 s/h.

MFJ's smallest Versa Tuner

$\$59^{95}$ MFJ-901B

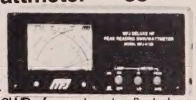


The MFJ-901B is our smallest -- 5x2x6 inches -- (and most affordable) 200 watt PEP tuner -- when both your space **and** your budget is limited. Good for matching solid state rigs to linears.

Covers everything from 1.8-30 MHz. Efficient airwound inductor. 4:1 balun.

HF Cross-Needle SWR/Wattmeter

MFJ-815B $\$69^{95}$

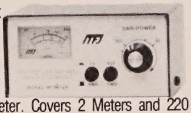


MFJ-815B wattmeter gives you a new **peak** reading function! Shows SWR, forward and reflected power in 2000/500 and 200/50 watt ranges. 1.8-30 MHz.

Mechanical zero adjusts for movement. Lamp uses 12 VDC or 110 VAC with MFJ-1312, $12.95.

MFJ VHF SWR/Wattmeter

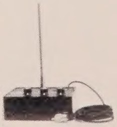
MFJ-812B $\$29^{95}$



MFJ-812B is the world's most popular (and most affordable) **VHF** SWR/Wattmeter with built-in Field Strength meter. Covers 2 Meters and 220 MHz. Read forward and reflected power in 2 ranges (30 or 300 watts). Read SWR from 14 MHz thru 220 MHz. Also read relative field strength from 1 to 220 MHz. Has binding post for field strength antenna. 2-color meter. 4½x2¼x3.

MFJ Portable Antenna

MFJ-1621 $\$79^{95}$



MFJ-1621 lets you operate where space for a full-sized antenna is a problem. Transmit/receive from 40-10 Meters. 54 inch telescoping whip mounts on 5½''x 6¾''x2¼'' case. Built-in tuner, field strength meter. 50' coax and connector.

Prices and specifications subject to change without notice or obligation. Add shipping/handling charges. © 1992 MFJ Enterprises, Inc.

Forums continued

1045 - 1145 YOUTH IN AMATEUR RADIO .... ROOM 4

Moderator: Carole Perry, WB2MGP
Christina Witkowski, KC6YUT. (13 years old)
Angie Fischer, KB0HXY. (13 years old)
Todd Martinson, KB9HGE. (15 years old)
Travis Wise, KB8FOU. (17 years old)
"Young Amateur of the Year Award", Bill Pasternak, WA6ITF and Carole Perry, WB2MGP

1100 - 1145 OHIO ARMY MARS .... ROOM 7
Moderator: Jack T. Shepherd, W8OMY, AAA5OH, MARS Director of Ohio
"Army MARS...1992 and Beyond", Leon Ritter, AAA6C, Central Area MARS Director
"Army Mars and the Digital Revolution", Jack Shephard, W8OMY/AAA50H

1115 - 1200 10-10 .... ROOM 3

Moderator: Hugh Sullivan, WA4QZU

1145-1245 DIGITAL SIGNAL PROCESSING .... ROOM 2
Moderator: Mike Fleming , Digital Interactive Signal Corp.
"IBM PC Compatible Audio Digital Signal Processor System"

1200-1330 DIGITAL DIGEST .... ROOM 4

Moderator: Dale Sinner, W6IWO, Publisher "Digital Digest"
"Aplink Software Programs", Vic Poor, W5SMM
"Software Products for Digital Modes", Jay Townsend, WS7I

1200-1300 "NETS: Getting the Most out of Yours" .... ROOM 7
Moderator: Hap Holly, KC9RP & Stephanie Holly, KA9WKD
Vern Jackson, WA0RCR, Sammy Garrett, AA0CR

1215-1430 SLOW SCAN TV .... ROOM 3

Moderator: Don C. Miller, W9NTP
"Everything You Ever Wanted to Know About the Many Modes of SSTV", Bert Beyt, W5ZR
"Latest Updates on the PYJ Stand-Alone IBM SSTV System", John Montalbano, KA2PYJ
"SSTV from a European Perspective", Nils Gustav Strom, SM5EEP
"Introduction of Foreign Slowscanners", Don C. Miller, W9NTP

1300-1430 FIREBIRDS .... ROOM 2

Moderator: Verle D. Winningham, K8VW
Jack Walters, WA8UXN

1300-1445 WAYNE GREEN: "A New Rationalization for Amateur Radio" .... ROOM 5

Moderator: Wayne Green, N2NSD/1

1300-1400 ELECTRICAL SAFETY DEMONSTRATION .... ROOM 6

Moderator: George Maurer & Tony Norman, Dayton Power & Light

1315-1445 AMPLITUDE MODULATION .... ROOM 7

Moderator: Dale Gagnon, KW1I
"AM Activity in the U.S. - A Panel Discussion", Don Chester, K4KYV
"A Great California AM Station - A Pictorial Review of the Station of W6HDU"

1330-1700 CONTESTS .... ROOM 1
Moderator: Tim Duffy, K3LR and Scott Jones, WR3G
"Serious Field Day Operations from Colorado", Gary Breed, K9AY
"The AA6TT/O Station", Bill Hein, AA6TT
"Radio Contesting Sport, Years of Change", John Dorr, K1AR
"Fiber Optic Links for Contest Computers", Richard King, K5NA
"Contesting from PJ7A", Dan Street, K1TO
"The Technique of Operating Two Radios for Contesting", Jeff Steinman, KR0Y
"A Travel Log of Russian Contest Stations", Gene Walsh, N2AA
"Station Review", UK9AAN,UZ9AYA and Others, Willy Umanets, UW9AR
"The ARRL Contest Department Update", Billy Lunt, KR1R

1345-1515 QRP HOMEBREWING & HISTORY .... ROOM 4

Moderator: Paula Franke, WB9TBU
"Using What's Available for Antennas & Homebrewing", Bill Hickox, K5BDZ
"The Pioneers of QRP", Norman Field, G4LQF

1445-1545 RED CROSS .... ROOM 2
Moderator: Mike Riley, KX1B, Associate, Disaster Communications
"American Red Cross Disaster Communications: A Partnership with Amateurs"

1445 - 1700 AMATEUR TV (Fast Scan ATV) .... ROOM 3

Moderator: Tom O'Hara, W6ORG
"Getting Started in Amateur Television", Bill Parker, W8DMR
"Spectrum Management Problems Related to ATV", Tom O'Hara, W6ORG
"Balloon, Rocket and R/C ATV Update", Bill Brown, WB8ELK and Bob Rau, N8IYD
"Handie Lookie Shoot-Out": Open Show & Tell Contest

1500 - 1700 AMSAT .... ROOM 5

Moderator: Mike Crisler, N4IFD
"Getting Started in Amateur Radio Satellite", Mike Crisler, N4IFD, AMSAT V.P. Field Operations
"OSCAR-13 World Wide Communication with VHF/UHF Anyone?", Keith Pugh, W5IU, AMSAT V.P. Satellite Operations
"The Pacsats, Anyone for VHF Packet from Africa?", John Kuklinski, N4PLY, AMSAT Manager, Groundstation Information

1500 - 1600 ELECTRICAL SAFETY DEMONSTRATION .... ROOM 6

Moderator: George Maurer & Tony Norman, Dayton Power & Light

1500-1700 REPEATER AND DATA BASE COORDINATION FOR AMERICA .... ROOM 7

Moderator: Ken Enenbach, KC0WX
Whit Brown, WB0CJX, Chairman, Coordination Committee, MACC
Dave Shiplett, AC4MU, President SERA
Robb Emerson, N0LLZ, National Data Base Coordinator, MACC
Jay Mabey, NU0X, Repeater Directory Editor, ARRL
Tom Hammond, N0SS, National Data Base SYSOP, MACC

1530-1700 RECEIVER PARAMETERS AND THE REALITY OF THEIR REQUIREMENTS .... ROOM 4

Moderator: Curt Davis, Regional Gr. Gec Plessey Semiconductors
Peter Chadwick, G3RZP, Senior Engineer, Professional Product Group
Receiver Design, Radar and Electronic Warfare, Gec Plessey Semiconductor

1600-1700 MID CARS .... ROOM 2

Moderator: Lloyd Stauffer, KB9J

SUNDAY FORUMS

0930 - 1100 RECRUITING NEW HAMS AND NEW YOUNG HAMS .... ROOM 1

Moderator: Bill Pasternak, WA6ITF, Amateur Radio Newsline, Inc.
Mark Steven Williams, N4OKX, WAVE-TV, Louisville, Ky.
Donald Stoner, W6TNS, President, National Amateur Radio Association
Joseph Schroeder, W9JUV, Consultek, Inc., Chicago, Il.
Richard (Sammy) Garrett, AA0CR, 1991 Young Ham of the Year
Forest Oden, N6ENV, CBS
Rosalie White, WA1STO, ARRL, Educational Director
Steve Mansfield, ARRL, Public Relations Director
Steve Mendelsohn, WA2DHF, ARRL, Hudson Div. Director & ABC Network
Mike Nikolich, Selz, Seabold, Inc., ARRL, Public Relations Firm

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0930-1100 BICYCLE MOBILE HAMS OF AMERICA .... ROOM 2

Moderator: Harley Alley, NA0A
"The Wonderful World of Bicycling", Harley Alley, NA0A
"Lightweight Rigs for HF", Ned Mountain, WC4X
"CW While Pedaling", Russ Dwarshuis, KB8U
"Home-Brewing Antenna Projects", Bob Pulhuj, KE8ZJ
"Suggestions for Improving our 20 Meter Net", Mike Nickolaus, NF0N

0930-1100 QRP-ARCI .... ROOM 3

Moderator: Jim Fitton, W1FMR
"The Present and Future of QRP", Lowell Corbin, KD8FR, MI-QRP
"Simple QRP Home Brew Projects", Jim Kearman, KR1S, QRP-NE
"QRP Amateur Radio Club International"
"Michigan QRP Club"
"QRP Club of New England"

0930-1100 ANTENNA TUNERS .... ROOM 4

Moderator: Ken Glanzer, K7GCO

0930-1030 FCC .... ROOM 5
Moderator: William T. Cross, WA3LJP, Management Analyst,
Personal Radio Branch
John B. Johnston, W3BE, Chief, Personal Radio Branch ....

1000-1100 ELECTRICAL SAFETY DEMONSTRATION .... ROOM 6

Moderator: George Maurer and Tony Norman, Dayton Power & Light

1100-1230 ARRL .... ROOM 5

Moderator: Allan Severson, AB8P, Director Great Lakes Division
Speakers: George E. Race, WB8BGY, Vice Director Great Lakes Division
George S. Wilson III, W4OYI, President ARRL

1115 - 1300 AMATEUR RADIO AND THE LAW .... ROOM 1

Moderator: James O'Connell, W9WU
Attorney James O'Connell, W9WU, Leads a Panel Discussion of the Latest "Developments in Antenna Zoning Cases with Tips on How to Get Your Antenna Up and Keep It Up".

1115-1300 STATION GROUNDING FOR LIGHTNING PROTECTION .... ROOM 2

Moderator: Roger Block, KD7UT

1115-1215 SUPERGAIN ANTENNAS .... ROOM 3

Moderator: Robert Haviland, W4MB

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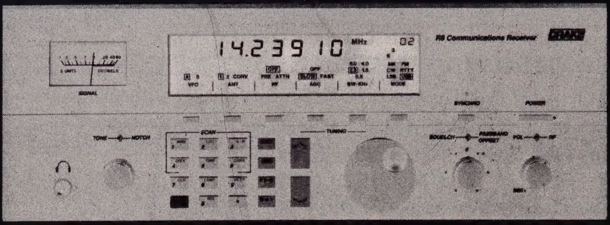

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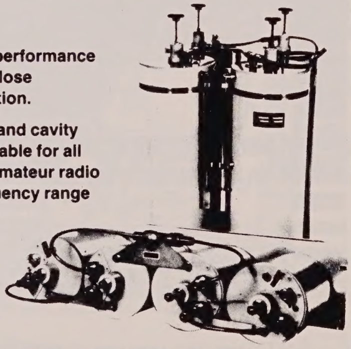

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1115-1300 ANARC LISTENERS FORUM .... ROOM 4

Moderator: Mike Schulsinger, N8QHV
"The Grove SW-100 Receiver", Bob Grove, WA4PYQ
"Recent Shortwave Broadcasting Developments", Steve Forest, WLWT-TV/Signals
"Listener Law News and WARC '92", Frank Terranella, N2IGO
"Association of North American Radio Club (ANARC) News", Richard D'Angelo, Bob Brown, KW3F, and Harold Cones
"DXing the Recently Expanded AM Broadcast Band", Mike Schulsinger, N8QHV

1115-1300 HF OPERATING TECHNIQUES FOR THE NEW & INEXPERIENCED HAM .... ROOM 7

Moderator: Mitch Stern, WB2JSJ
"How to be a Good Operator for Contesting", Dxing or Ragchewing
"Making the Most of Low Power"
"Having Fun in the Novice Roundup and 10 Meter Contest"
"Field Day - The Great Training Ground"
"Dxing - A to Z"

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1992 HAMVENTION FORUM SCHEDULE

FRIDAY – APRIL 24

TIME	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7
1300	AMSAT 1300-1445	Development Tools for the Engineer 1300-1430	Alternate Activities *"Make-it & Take it" Free* 1300-1645 *(See Separate Schedule for Saturday and Sunday Activities)*	Packet Radio 1300-1645	Antennas 1300-1645		International Hungarian Amateur Radio Club 1300-1500
1400		QRP 1445-1530				Electrical Safety Demonstration 1400-1500	
1500	County Hunters 1500-1645	Using the Sarex Program in the Classroom 1545-1645					Collins Users Group 1515-1645
1600							
1700							

SATURDAY – APRIL 25

TIME	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7
0900	DX Forum 0900-1300	ARES 0900-1030	WX Satellite 0900-1100	Combined MARS 0900-1030	VHF/UHF Forum 0900-1230		Buried Antenna 0900-0945
1000		OSSBN 1045-1130		Youth in Amateur Radio 1045-1145		Electrical Safety Demonstration 1000-1100	GERITOL Net 1000-1045
1100		Digital Signal Processing 1145-1245	10 –10 1115-1200				Ohio Army MARS 1100-1145
1200			Slow Scan TV 1215-1430	Digital Digest 1200-1330			Nets:Getting the most out of yours 1200-1300
1300	Contest Forum 1300-1700	Firebirds 1300-1430		QRP Homebrewing & History 1345-1515	Wayne Green 1300-1445	Electrical Safety Demonstation 1300-1400	Amplitude Modulation 1315-1445
1400		Red Cross 1445-1545	Amateur TV *(Fast Scan ATV)* 1445-1700				
1500				Receiver Parameters and the Reality of their Requirements 1530-1700	AMSAT 1500-1700	Electrical Safety Demonstration 1500-1600	Repeater & Data Base Coordination for America 1500-1700
1600		MID CARS 1600-1700					
1700							

SUNDAY – APRIL 26

TIME	ROOM 1	ROOM 2	ROOM 3	ROOM 4	ROOM 5	ROOM 6	ROOM 7
1000	Recruiting New Hams 0930-1100	Bicycle Mobile Hams of America 0930-1100	QRP 0930-1100	Antenna Tuners 0930-1100	FCC 0930-1030	Electrical Safety Demonstration 1000-1100	
1100	Amateur Radio and the Law 1115-1300	Station Grounding for Lightning Protection 1115-1300	Super-gain Antennas 1115-1215	ANARC Listeners Forum 1115-1300	ARRL 1100-1230		HF Operating Techniques for the New & Inexperienced Ham 1115-1300
1200							
1300							

1992 Hamvention Forums Schedule

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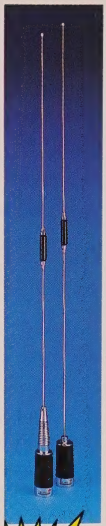

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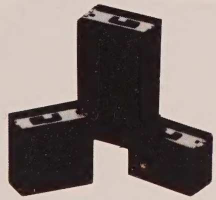

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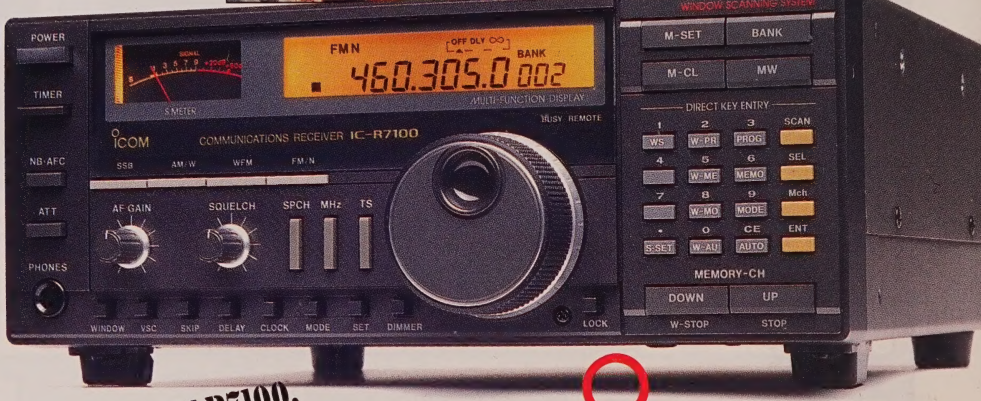

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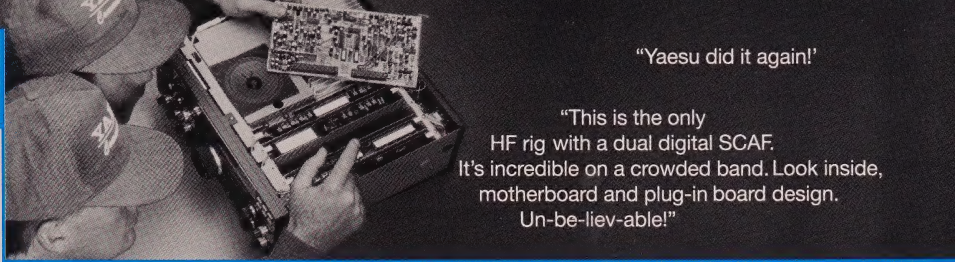

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"This is the only HF rig with a dual digital SCAF. It's incredible on a crowded band. Look inside, motherboard and plug-in board design. Un-be-liev-able!"

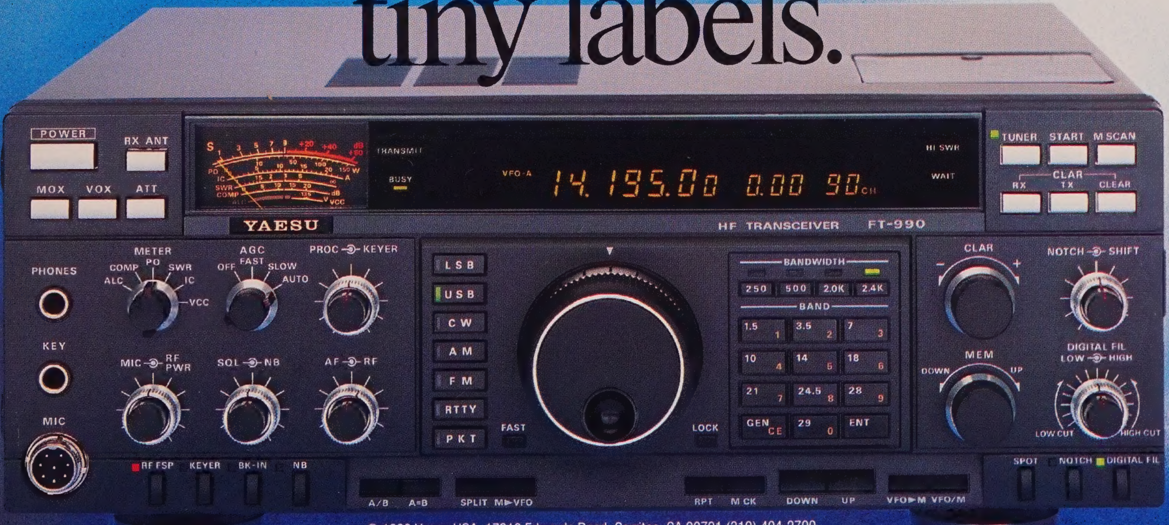
The innovative technology of the FT-990 is inside, not outside. Like the exclusive dual digital SCAF (Switched Capacitance Audio Filter). And for long term reliability, the motherboard/plug-in module construction eliminates interboard wiring. The FT-990 also has the same undisputed receiver performance of the FT-1000 as well as other features such as a high-speed, built-in antenna tuner with automatic storage. And, multiple DDS (Direct Digital Synthesis) for quick lock-up time and low level noise. What's more, for maximum efficiency, the FT-990 is a self-contained base station with its space-saving, built-in AC power supply.

Outside, the very functional HF front panel is simple and uncluttered with a large amber display. Easy to use, easy to see. Pure and simple QSO enjoyment – with muscle when you need it! Yaesu makes "high-tech" effortless. Now it works for you, not against you. Have your dealer show you the FT-990 today and see what we mean.

YAESU

Performance without compromise.℠

High-tech innovation isn't miniature knobs, switches, and tiny labels.



© 1992 Yaesu USA, 17210 Edwards Road, Cerritos, CA 90701 (310) 404-2700

Specifications subject to change without notice. Specifications guaranteed only within amateur bands. Some accessories and/or options are standard in certain areas. Check with your local Yaesu dealer for specific details.

See us in Booth 521,522,523,533,and 534 We are a Hamvention Prize Donor

MODEL SG-2000 HF SSB RADIOTELEPHONE

Most hams would never subject our SG-2000 all frequency HF transceiver to the kind of extreme conditions we designed it for. You'd likely be satisfied having 150 watts output, 644 ITU channels, 100 user defined (ham) frequencies in memory plus a direct entry VFO with 10 Hz stability, full frequency coverage and a superb 2:1 IF shape factor. Features such as FCC Type Approval, made with pride in America, direct Weatherfax support, up to 8 control heads and full performance from -22F to +140F might seem a bit extreme. But if you ever chewed the rag on 20 meters in a Force 9 Arctic gale, you'd appreciate that there's a difference between extreme performance and performance in the extremes.

EXTREME PERFORMANCE!

SGC

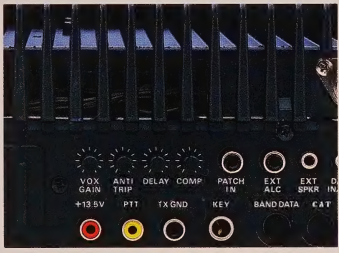
World's finest HF SSB radiotelephones

See us in Booth 564-565 We are a Hamvention Prize Donor

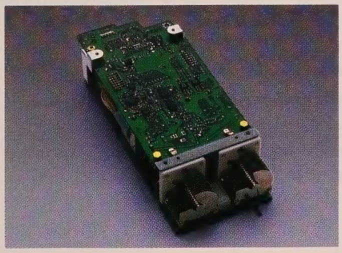
SGC Inc. SGC Building, 13737 S.E. 26th St. Bellevue, WA. 98005 USA
P.O. Box 3526, 98009. Telex: 328834. Fax: 206-746-6384. Tel: 206-746-6310

FT-890AT...Light Years Ahead.

World's Smallest With Built-in Antenna Tuner



Rear Panel: Seldom used controls are located on rear panel allowing clean uncluttered front panel design.



Antenna Tuner: High speed with 31 memories automatically stores most recent antenna matching settings for instant recall while changing operating frequencies.

Mobile Installation: The compact design and built-in antenna tuner makes the FT-890 a great mobile companion, using the optional mounting bracket kit (MMB-20).

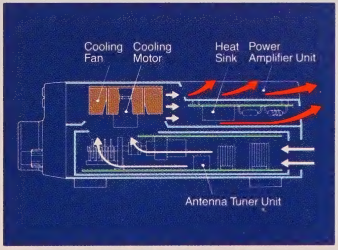
Superior Performance

The FT-890 is an extraordinary achievement, featuring DLT (Digital Linear-phase Tuning) for silky smooth tuning. Including the advanced RF Front End design of the FT-1000 for superior receiving performance. Compare the advantages for yourself, it's ready to go when you are! Call your nearest Yaesu dealer for one of the best DX-pedition radios ever.

YAESU

*Performance without compromise.*SM

Specifications subject to change without notice.
Specifications guaranteed only within amateur bands.
One Year Limited Warranty on all Amateur Products.



DFCS (Duct Flow Cooling System): This unique system allows 100% duty cycle on FM and RTTY for up to 30 minutes of continuous transmission.

Radio & Matching Power Supply: The FT-890 is ideal for home, mobile or field use with the optional power supply. Significantly smaller and lighter than competing units.

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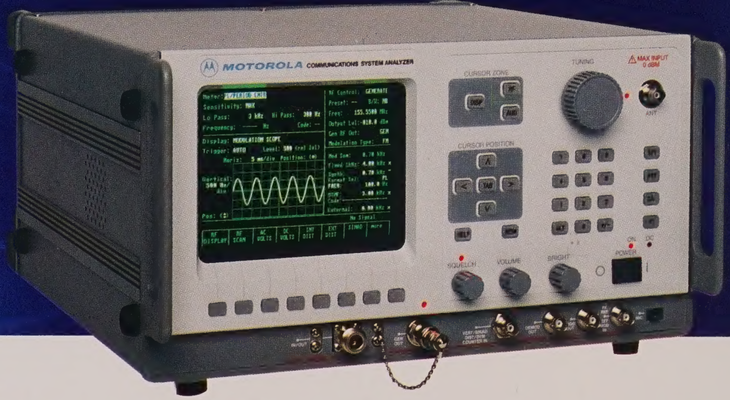
COME VISIT US
AT BOOTH
608
AND
615

FUTURE SHOP

R2600



All that test equipment you've been using, with its endless cabling and "we mean business" knobs and switches, has served you well over the years. But someday you're going to need to replace it. That someday is today!

Digital testing is a reality; Cellular testing is big business; Software-driven testing is the future, and it's all available now in one box... the R2600 from Motorola.

The R2600 can provide:

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- Sweep Generator
- Duplex Offset Generator
- AC/DC Voltmeter
- Sensitive Off-the-Air Receiver
- Audio Generators
- AF & RF Counters
- Full Screen Spectrum Analyzer with Audio
- SINAD & Distortion Meters
- Terminated Wattmeter
- Signalling Simulator & Decoder
- Signal Strength Meter
- Full Screen Digital Oscilloscope
- 50 MHz Tracking Generator Option
- Cable Fault Option
- Subscriber Unit & Cellular Base Station Test Options

The R2600 features: 30 Test Set-Up Memories; Built-in Self Calibration: RS-232 Remote Control; Operator Selectable Special Functions; Help Screens; and a Color Monitor Port.

Easy to use, easy to setup, transportable, intuitive to operate, economical, and upgradeable: with the R2600 you will always be ***future shop.***

For information on establishing your ***future shop,***
Call **1-800-235-9590**
or call (602) 441-8676, or write:
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MOTOROLA

See us in Booth 608-615

1992 Alternate Activitivies Schedule - Meadowdale High School

SATURDAY - APRIL 25				SUNDAY - APRIL 26		
9:00 - 10:00	10:30 -12:00	12:00 - 2:00	2:00 - 4:00	9:00 - 10:00	10:00 - 12:00	12:00 - 1:30
Spiral Angel *Janet Taylor* $3.00 Limit 25	**Weave Your Own Napkin Basket** *Debbie Halliday* $3.00 Limit 15	LUNCHEON	**Weave Your Own Classic Round Basket** *Debbie Halliday* $3.00 Limit 15	**Woodland Bear** *Pauline Kojola* $3.00 Limit 20	**Learn the Basics of Floral Design** *Pauline Kojola* $3.00 Limit 20	LUNCHEON
Silk Screen T-Shirt *Vita Saluke* $3.00 Limit 30	**Beri Chair with Simaway Hat** *Pauline Kojola* $3.00 Limit 24		**American Clothespin Doll** *Janet Taylor* $3.00 Limit 30	**Padded Heart Ornament** *Janet Taylor* $3.00 Limit 30	**Ceramic Ornaments to Paint** *Janet Taylor* $3.00 Limit 30	
Soviet Laughter, Soviet Tears *Christine Dull* No charge	**The American Glimpses: A Reading of Original Poems about My American Experience** *Dr. Gary Pacernick* No charge		**Learn About Skin Care with Mary Kay Cosmetics** *Cheryl Dougan* Free Limit 30	**Create Your Own Jewelry with Friendly Plastic®** *Maxine Hawkins* $3.00 Limit 25	**Tussie Mussie with Paper Twist Flowers** *Maxine Hawkins* $3.00 Limit 25	
Glass Stain in a Frame *Maxine Hawkins* $3.00 Limit 25	**Silk Screen T-Shirt** *Vita Saluke* $3.00 Limit 30		**Design Your Own Stationery** *Maxine Hawkins* $3.00 Limit 25			
Butterfly Wall Decoration *Pauline Kojola* $3.00 Limit 24	**Beaded Cross-Stitch for Christmas** *Janet Taylor* $3.00 Limit 30		**Learn the Basics of Floral Design** *Pauline Kojola* $3.00 Limit 30			
	Tussie Mussie with Paper Twist Flowers *Maxine Hawkins* $3.00 Limit 25		**Bingo** No Charge			

Prizes

The Dayton Hamvention is proud to present an outstanding array of prizes for 1992, representing aproximately 105 exhibitors and other donors.

Prizes will be awarded hourly from 1300 Friday to 1200 Sunday.

Additional Bonus prizes will be awarded bi-hourly from 1300 Friday to 1100 Sunday.

Please check the monitors located throughout the arena complex for winning ticket numbers.

All prizes not claimed by 1300 Sunday will be redrawn at 1400. You MUST be present in the Main Arena during this drawing to win.

The drawing for the Main Prizes will begin at approximately 1500 Sunday.You do not have to be present to win. Prizes not claimed during this drawing will be shipped to the winner at no charge.

- **ICOM IC-781 Station with IC-4KL Linear Amplifier and SM-8 Desktop Microphone.** ICOM's communications "Masterpiece".
- **Yaesu U.S.A. FT-1000D HF Transceiver, FL-7000 Linear, SP-5 Speaker, MD-1c8 Mic, and YH-77ST Headphones.**
- **Kenwood TS-950SD Super Deluxe HF Transceiver with Digital Signal Processor and built in Automatic Antenna Tuner.**
- **acc:advanced computer controls RC-850 Repeater Controller with Computer Interface.**
- **Yaesu U.S.A. FT-990 HF Transceiver with SP-6 Speaker, MD-1c8 Mic and YH-77ST Headphones.**
- **Kenwood TS-850S Competition Class HF Transceiver**
- **ICOM IC-725 Compact HF Transceiver with AH-3 Automatic Antenna Tuner and AH-2b Mobile Antenna.**
- **Telex Communications, Inc. TH5MK2 Tri-band Beam Antenna with T2X "Tailtwister" Rotator.**
- **Standard Amateur Radio Products, Inc. C5608DA 144/440 MHz Dual Band Mobile Transceiver with optional extension cable for remote installation.**
- **DX Engineering, Inc. LP-20 HF Log Periodic Antenna**
- **Mosley PRO-67-B 7-Element 8-Band Beam covering 10 thru 40 Meters**
- **Hewlett Packard Co. HP 33401A Benchtop Digital Voltmeter with Frequency Counter**

Student Ticket Drawing

A special drawing will be held Sunday, 12:00 noon at Booth 611 for those with student tickets.

Top Ten Prize Donors

We would like to extend a special thanks to our Top Ten prize donors for 1992.

1. Yaesu U.S.A.
2. ICOM America, Inc.
3. Kenwood U.S.A. Corporation
4. Standard Amateur Radio Products, Inc.
5. CQ Communications, Inc.
6. Buckmaster Publishing
7. Mosley Electronics, Inc.
8. Telex Communications, Inc.
9. Alinco Electronics Inc.
10. acc:advanced computer controls, inc.

We greatly appreciate their extraordinary participation and support of the 1992 Dayton Hamvention.

Be sure to stop by their booths and say "Thanks".

Prizes continued

At press time, we have commitments for over $120,000 in prize donations! We heartily thank all those who have donated prizes this year. The following Bonus Prizes will be drawn bi-hourly beginning at 1300 Friday. You must claim these prizes by 1300 Sunday.

Alinco	DR-599 Dual Band Mobile Transceiver
Kenwood	TH-27A Super Compact 2m Handhelds
ICOM	IC-W2A Dual Band Handheld
Yaesu	G-1000SDX HD Deluxe Rotator
CQ Communications	Lifetime Subscription to Computer Craft
Telex Communications	TH3JRS Tri-band Beam
Yaesu	FT-26X/25-B 2m Handheld
Standard Amateur Radio	C468A 440 MHz Handheld
Kenwood	TM-631A Compact 2m/220 MHz FM Dual Band Mobile Transceivers
Mosley	TA-33M WARC 5 Band Beam
Yaesu	G-5600B AZ-EL Medium Duty Rotator
Kenwood	TH-27A Super Compact 2m Handhelds
Alinco	DJ-580T Dual Band Handheld
Bird	Model 43P Wattmeter
Kenwood	TM-631A Compact 2m/220 MHz FM Dual Band Mobile Transceivers
Yaesu	FT-26X/25-B 2m Handheld
CQ Communications	Lifetime Subscription to CQ Magazine
EDCO	DP-830 Digital Wattmeter
Yaesu	FT-26X/25-B 2m Handheld
Standard Amateur Radio	C168A 2 Meter Handheld
Telex Communications	TH3JRS Tri-band Beam
Yaesu	G-1000SDX HD Deluxe Rotator
CQ Communications	Lifetime Subscription to Popular Communications
Kenwood	TM-631A Compact 2m/220 MHz FM Dual Band Mobile Transceivers
ICOM America	IC-24AT Dual Band Handheld
Yaesu	FT-26X/25-B 2m Handheld
JDR Microdevices	286 PC Kit
Kenwood	TM-631A Compact 2m/220 MHz FM Dual Band Mobile Transceivers
CQ Communications	Lifetime Subscription to Popular Communications

Yaesu	G-5600B AZ-EL Medium Duty Rotator
Kenwood	TH-27A Super Compact 2m Handhelds
Alinco	DJ-580T Dual Band Handheld
Mosley	TA-33Jr WARC 5 Band Beam
Yaesu	FT-26X/25-B 2m Handheld
Kenwood	TH-27A Super Compact 2m Handhelds
Standard Amateur Radio	C468A 440 MHz Handheld
Missouri Radio Center	Alinco DR-590T Dual Band Mobile
Yaesu	G-1000SDX HD Deluxe Rotator
OPTOelectronics, Inc.	Model 3000 Frequency Counter
Outbacker Antenna Sales	OB-8 All Band Mobile Antenna
Yaesu	FT-26X/25-B 2m Handheld
CQ Communications.	Lifetime Subscription to CQ Magazine
Kenwood	TM-631A Compact 2m/220 MHz FM Dual Band Mobile Transceivers
Standard Amateur Radio	C528A Twin Band Handheld
Yaesu	FT-26X/25-B 2m Handheld
ICOM America	IC-24AT Dual Band Handheld
SGC, Inc.	Model SG-230 Micro Controlled Antenna Tuner
Yaesu	G-1000SDX HD Deluxe Rotator
Standard Amateur Radio	C168A 2 Meter Handheld
Kenwood	TH-27A Super Compact 2m Handhelds
Telex Communications	DX-88 8 Band Vertical
Yaesu	FT-26X/25-B 2m Handheld
CQ Communications	Lifetime Subscription to CQ Magazine
Standard Amateur Radio	C228A Twin BAnd Handheld
Telex Communications	TH3JRS Tri-band Beam
Yaesu	FT-26X/25-B 2m Handheld
Mosley	TA-33M WARC 5 Band Beam

Special Banquet Prizes

A wide assortment of prizes will be given away at the 1992 Hamvention Banquet. Winners must be present at the banquet to claim the prize.

- **Yaesu U.S.A. FT-890AT** HF Transceiver with mobile mount and speaker
- **Kenwood TS-450S/AT** Light weight, compact HF Transceiver with built in Automatic Antenna Tuner
- **Standard Amateur Radio Products C5608DA** 144/440 Dual Band Mobile Transceiver
- **ICOM IC-2410H** Dual Band Mobile Transceiver with Tone Squelch Option
- **PC Repeater Controllers PCRC/2** PC Based Repeater Controller
- **R.L. Drake Company R-8** Communications Receiver
- **Standard Amateur Radio Products C228A** 144/220 MHz Twin Band Handheld
- **Standard Amateur Radio Products C528A** 144/440 MHz Twin Band Handheld
- **P.W. Publishing Ltd. Lifetime Subscription to Practical Wireless Magazine**
- **Yaesu U.S.A. FT-5200** 2m/70cm Dual Band Mobile Transceiver
- **Alinco Electronics DR-599** Dual Band Transceiver
- **Mosley Electronics TA-53M** 5-Band Beam covering 10-20 Meters

The leading edge in Ham Radio Software

LOGic II--logging, awards tracking, QSLing, contesting, radio interfacing, etc.--**$79**

LOGic Jr.-- logging, awards tracking, QSLing, etc.--**$39**

QSL Manager Disk--over 14,000 of the latest routes, integrates with LOGic II or available as a stand-alone version--**$10**

Radio Interface Kits--Yaesu, Kenwood, Icom, will work with any software--**sale! $59**

come see us at booth 634

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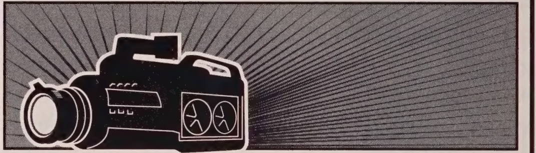
See us in Booth 634 We are a Hamvention Prize Donor



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Television producers are currently seeking your video tapes, films and stories about your favorite hobby! Topics to be included: Amateur radio, Citizens Band operations, short-wave listening, radio remote-control, packet, maritime / aeronautical mobile, AMSAT, AMTOR ...and other radio-related subjects!

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See us in Booth 429

We are extremely pleased to have as our Banquet Speaker, Roy Neal, K6DUE, was formerly NBC News Correspondent and Deputy Chief, NBC News Operations, West. He was the network's leading expert on aerospace coverage, and has been present at each of America's major space flights.

Roy began hamming in 1934 when he was first licensed as W3GIB in the Philadelphia area. From home brew equipment he migrated into early experimental work including aeronautical mobile transceivers on 5 meters. He was among the early experimenters with tri-band antennas and two meter relay stations (known today as repeaters).

Moving to California in 1952, he was assigned K6DUE, and has been active on most amateur bands since.

Roy is probably best known in the amateur fraternity because of his documentaries for the ARRL, "Moving up to Amateur Radio" and "The World of Amateur Radio", and "Ham Radio in Space".

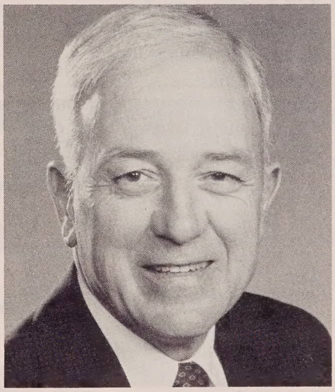
His most current projects have been "Amateur Radio's Newest Frontier" (Pre- and Post-Flight Versions) and "SAREX...Shuttle Amateur Radio Experiment". These are in release and currently being seen by amateurs all over the world.

Roy is generally given credit as one of the key people responsible for getting Amateur Radio aboard the Space Shuttles.

Roy Neal, K6DUE

Master of Ceremonies for the 1992 Dayton Hamvention Banquet will be Dick Rathbun, K2PKZ, Assistant Dean, College of Engineering and Computer Science, Wright State University, Dayton, Ohio. Dick received a Bachelor of Electrical Engineering degree (1958) from Rensselaer Polytechnic Institute, Troy, New York, and earned his amateur license during the same year. Dick is also a retired Lt. Colonel, having served over 23 years with the United States Air Force.

The Hamvention Banquet will be held at the Dayton Convention Center. Doors open at 6:00. Cash bar will be available. Dinner will be served at 7:30. Buses will run from many local motels; see page 84 for information. Adequate parking is readily available in the Convention Center Garage. "The Hal Harris Orchestra" will provide tasteful background music for the evening beginning at 6:00 p.m.



Dick Rathbun, K2PKZ

Banquet Menu

Garden Salad ❖ Filet Mignon
Baked Potato with Butter and Sour Cream ❖ Broccoli, Cauliflower, Carrots
Assorted Rolls and Butter
Mousse ❖ Coffee & Decaf - Hot Tea - Milk - Ice Tea ❖ Carafes of wine available at C.O.D. Bar

Prize Donors

73 Amateur Radio Today

acc: advanced computer controls, inc.
Alfa Electronics, Inc.
Alinco Electronics Inc.
Amateur Radio Mail Order Catalog
the antenna specialists co.
ARRL: American Radio Relay League
Atlantic Solar Products
ATVQ: Amateur TV Quarterly

Bill Barrick
Bird Electronic Corp.
Bonelli Industries
Buckmaster Publishing
Burk Electronics

Cable X-Perts, Inc
C.A.T.S.
CME Electronics
Coaxial Dynamics, Inc.
Compustuff
Computer Integrated Systems
CQ Communications, Inc.
Custom 4-U / Quality Rubber Stamps

DB Computer Products
Debco Electronics, Inc.
Den-Tronics
Digital Communications, Inc.
Donnux Shareware
Down East Microwave
R. L. Drake Company
The DX Bulletin - W6GO/K6HHD
DX Engineering, Inc.

Easytech, Inc.
EDCO/Electronic Distributors Corp.
Electronics Plus
Englehaupt Embroidery
Enhanced Systems Corp.
EQF Software
ERM Inc.

The Forbes Group

Gem Radio

HAM-PRO Antennas, Div. of Kopps Corp.
Hampute, Inc
Ham Radio Toy Store
Heil Sound, Ltd.
Hewlett Packard Co.
HR Bookstore
Hustler, Inc.

ICOM America, Inc.
IIX Equipment Ltd.
International Radio and Computers, Inc.

j-Com
JDR Microdevices

K2AW's "Silicon Alley"
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Metal and Cable Corp., Inc.
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Ramsey Electronics, Inc.
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Science Workshop
SGC, Inc.
Shaffer Enterprises
The Sign Man of Baton Rouge
Software Systems Consulting
Solder-It Co.
Standard Amateur Radio Products, Inc.
Startek International, Inc.

Telex Communications, Inc.

Vector Control Systems
Vectronics Corp., Inc.
VHF Communications
Vibroplex Co.

Gordon West Radio School
Wizardware, Ltd.
WJ2O Software
Worldradio
W&W Associates (Batteries)

Yaesu, U.S.A.

Dayton Amateur Radio Association Hamvention

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Vice President	Jim Schoettinger, WA8SVV
Secretary	Dave Coons, WT8W
Treasurer	Sharon Brown, N8CZD
Senior Director	Barbara Hillman, N8EYW
Junior Director	Al Torres, KP4AQI

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Building	Tom Holmes, N8ZM
Education	Sherwin Kidd, KA8LLO
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Interference	Julie Moreo, N8JHP
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Planning Council	
Senior Director	Barbara Hillman, N8EYW
Junior Director	Al Torres, KP4AQI
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2nd Yr.	Bob Roettele,W8UNV
1st Yr.	Charlie Walker, N5EKU
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Technical	Earl Moreo, N6FXB
W8BI Trustee	Charles Cotterman, KA8OQF

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Club House	
Antennas	Jim Schoettinger, WA8SVV
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Satellites	Gerd Schrick, WB8IFM
Station	Gregg Brewer, KB4TLH
Constitution	Charlie Walker, N5EKU
Equipment Custodian	Bob Kling, K8GJL
Fellowship	Ernie Hudson, KI8O
Historian	Lesley Brewer, KB8IDM
Hospitality	Lula Wichlac, KY2X
Information	Candy Shively, KE8YD
Newsline	Paul Schweikhart, KB8EPN
Parliamentarian	Gary Shanafelt, N8LOS
Red Cross EOC	Ernie Hudson, KI8O
RF-Carrier,Editor	Dave Morris, N8EEK
Assistant Editor	Jim Nies, WX8F
Scholarship	Stan Kuck, NY8F
Van Operations	
Van Events	Ron Moorefield, W8ILC
Van Crews	Lesley Brewer, KB8IDM
Van Maintenance	Dave Coons, WT8W
Volunteer Exams	Joe Gavin, KA8VMA
W8BI Repeaters	
2 Meter Repeater	Daun Yeagley, N8ASB
220 MHz Repeater	Daun Yeagley, N8ASB
440 MHz Repeater	Tom Holmes, WB8QVC
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Awards Nomination

Help us locate nominees for our Amateur of the Year, Special Achievement, and Technical Excellence Awards. Do you know an outstanding amateur in your club, community, or from on-the-air contacts? Does this person excel in some phase of amateur radio? Do you feel this person deserves world-wide recognition? All amateurs are eligible – Novice through Extra. Awards are selected by the nominating committee based on the information received. Please do not try to influence the committee by "voting" with QSL cards.

Documentation is beneficial. Magazine articles, newsletters, newspaper clippings, videos, etc. will better inform the nominating committee of your candidate's accomplishments.

This is for the special person who has made a long term commitment to the advancement of amateur radio. We are looking for a well-rounded individual who has contributed to our hobby in some outstanding way.

This is for the special person who has made an outstanding contribution to the advancement of amateur radio. This award is usually given to a respected amateur who spearheaded a single significant project.

This is for the person who has made an outstanding technical advancement in the field of amateur radio.

Name of nominee ______________________ Call ______________

Address ____

City ______________________ State __________ Zip __________

Phone (______) ______________________

Amateur club affiliation ________________________________

____

____

____

____

____

____

Other ____

Your name (please print) ______________________ Call ______________

Address ____

City ______________________ State __________ Zip __________

Phone: ☐ Day ☐ Evening (______) ______________ Your Signature ______________

Send nomination to:
Hamvention Awards Chairman
Box 964
Dayton, OH 45401-0964

Please feel free to duplicate this form.

1992

Award Winners

These awards will be presented at the Hamvention banquet.

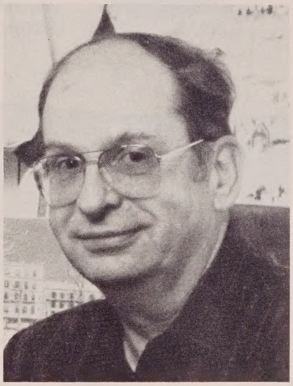
Amateur of the Year Award

RICHARD BALDWIN, W1RU

There is nothing more valuable to radio amateurs than the frequencies and bands we are entitled to use. We could invent elaborate modulation methods and communication networks but without frequencies, such achievements would be meaningless. Richard Baldwin, W1RU, was a driving force at the 1979 international WARC who obtained our 12, 17 and 30 meter bands. (Now known as the WARC bands.) His work with the ARRL has included assistant secretary, managing editor, assistant manager, and general manager. Currently he is President of the IARU.

Special Achievement Award

NED RAUB, W1RAN

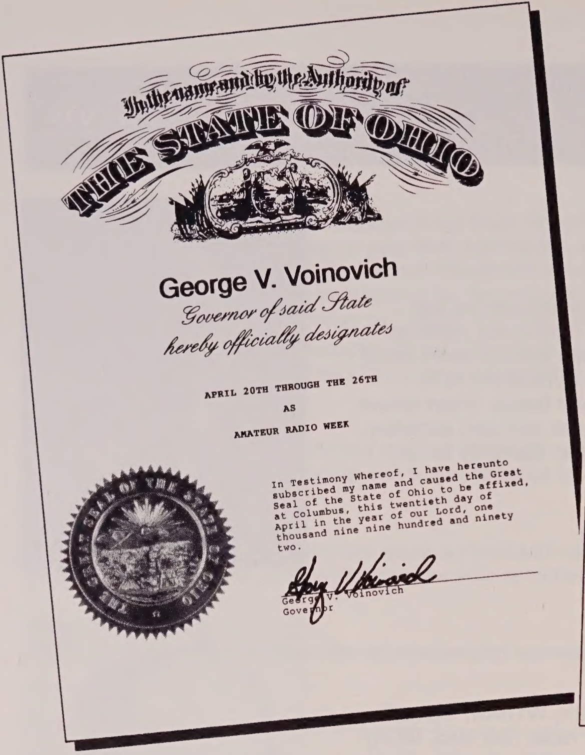


Special achievements come in various forms. Ned Raub's, W1RAN, Special Achievement was from the humanitarian side of amateur radio. For Ned, DXing is more than exchanging signal reports, it's about getting to know people. During a forty month period, Ned was deeply involved with the reuniting of a Cambodian war refugee and his family. Via amateur radio, contacts were made around the world searching for information. An initial contact at 14.165 on October 12, 1987, between Ned and Piseth Keo ended on a happy note when Piseth was reunited in Seattle on February 28, 1991, with his mother, three brothers, and a sister. Recently Ned was successful in getting oncology drugs for a cancer stricken relative of a ham friend in the Soviet.

Technical Excellence Award

GERALD CROMER, K4NHN

Being the ultimate optimist when confronted with comments like "This is the way it has to be done" or "This is the way it has always been," Gerald Cromer, K4NHN, set out to invent a 'better mousetrap.' With ATV's need for a horizontally polarized omni-directional antenna with gain, Gerald took the principles of the Alford slot antenna and developed a more simply constructed antenna called the Rib Caged Slot. His three years of research and experimentation led to an antenna which has twenty-two loops fastened to two vertical column support pieces. This easy to build, low cost antenna has enhanced the ATV aspect of amateur radio.



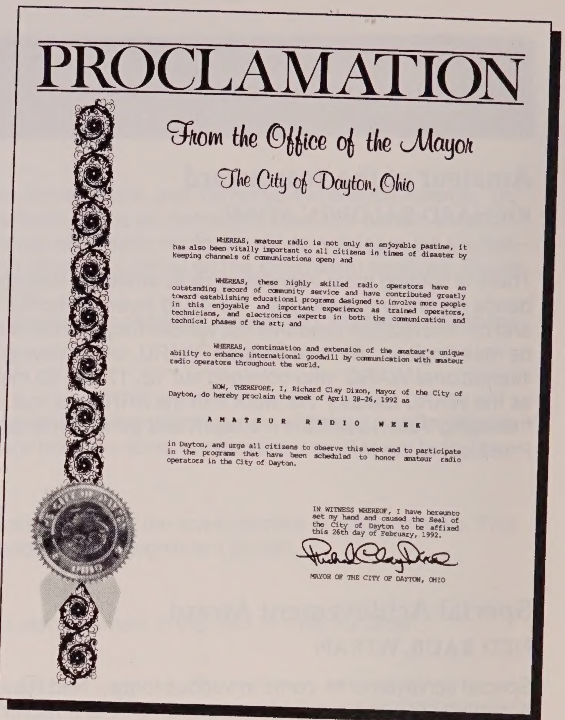
In the name and by the Authority of
THE STATE OF OHIO

George V. Voinovich
Governor of said State
hereby officially designates

APRIL 20TH THROUGH THE 26TH
AS
AMATEUR RADIO WEEK

In Testimony Whereof, I have hereunto subscribed my name and caused the Great Seal of the State of Ohio to be affixed, at Columbus, this twentieth day of April in the year of our Lord, one thousand nine nine hundred and ninety two.

George V. Voinovich
Governor



PROCLAMATION

From the Office of the Mayor
The City of Dayton, Ohio

WHEREAS, amateur radio is not only an enjoyable pastime, it has also been vitally important to all citizens in times of disaster by keeping channels of communications open; and

WHEREAS, these highly skilled radio operators have an outstanding record of community service and have contributed greatly toward establishing educational programs designed to involve more people in this enjoyable and important experience as trained operators, technicians, and electronics experts in both the communication and technical phases of the art; and

WHEREAS, continuation and extension of the amateur's unique ability to enhance international goodwill by communication with amateur radio operators throughout the world.

NOW, THEREFORE, I, Richard Clay Dixon, Mayor of the City of Dayton, do hereby proclaim the week of April 20-26, 1992 as

AMATEUR RADIO WEEK

in Dayton, and urge all citizens to observe this week and to participate in the programs that have been scheduled to honor amateur radio operators in the City of Dayton.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City of Dayton to be affixed this 26th day of February, 1992.

Richard Clay Dixon
MAYOR OF THE CITY OF DAYTON, OHIO

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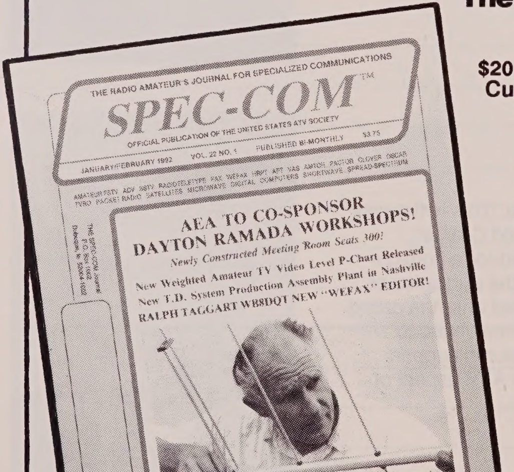
The SPEC-COM Journal

SCj AMATEUR RADIO


THE RADIO AMATEUR'S JOURNAL FOR SPECIALIZED COMMUNICATIONS
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DARA Scholarship Program

Since 1984, the Dayton Amateur Radio Association has been able to assist young amateurs heading to college by awarding scholarships. In 1991 eight students each received $1500 toward tuition at the school of their choice. The program is open nationwide to any FCC licensed amateur radio operator graduating from high school in the year the award is given. There are no restrictions on class of license or course of study. The 1991 scholarship recipients are:

Mary K. Beardslee, **N8HEY**, of Kingswood, West Virginia. Mary holds a General Class license and attends Potomac State College majoring in the field of mathematics.

Jennifer Doerrie, **KA5WMJ**, of Booker, Texas. Jennifer holds a General Class license and attends Angelo State University majoring in the field of journalism.

Martin Gruen, **KA2VLD**, of Barrington, New Jersey. Martin holds an Advanced Class license and attends Stetson University majoring in the field of biology.

James Harper, **KB5CTQ**, of Amarillo, Texas. Recipient of the Charles G. Frye Memorial Scholarship. James holds an Extra Class license and attends Rice University majoring in the field of electrical engineering and pre-med.

Jerry Hensley, **N8HUT**, of New Paris, Ohio. Recipient of the Robert F. Zimmerman Memorial Scholarship. Jerry holds a General Class license and attends Wright State University majoring in the field of psychological counseling.

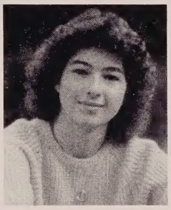
Robert Macedo, **N2JXQ**, of Saratoga Springs, New York. Robert holds an Advanced Class license and attends Southeastern Massachusetts University majoring in the field of electrical engineering.

John Scott, **KA9OAG**, of Osgood, Indiana. John holds a Novice Class license and attends Ball State University majoring in the field of education.

Eric Stewart, **KA5YYW**, of White Oak, Texas. Eric holds a General Class license and attends Kilgore College majoring in the field of electrical engineering.

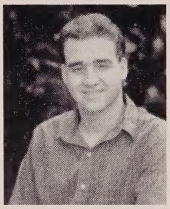
Entries for 1992 scholarships must be in by May 15 with winners announced on or about June 1. For further information and application forms write:

DARA Scholarship Program
45 Cinnamon Court
Springboro, Ohio 45066

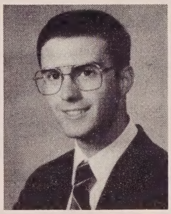


Mary
N8HEY

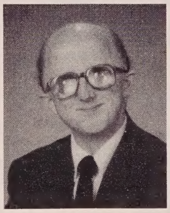
Jennifer
KA5WMJ



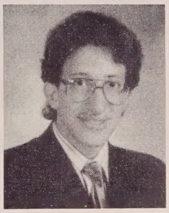
Martin
KA2VLD



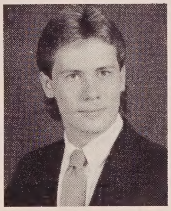
James
KB5CTQ



Jerry
N8HUT



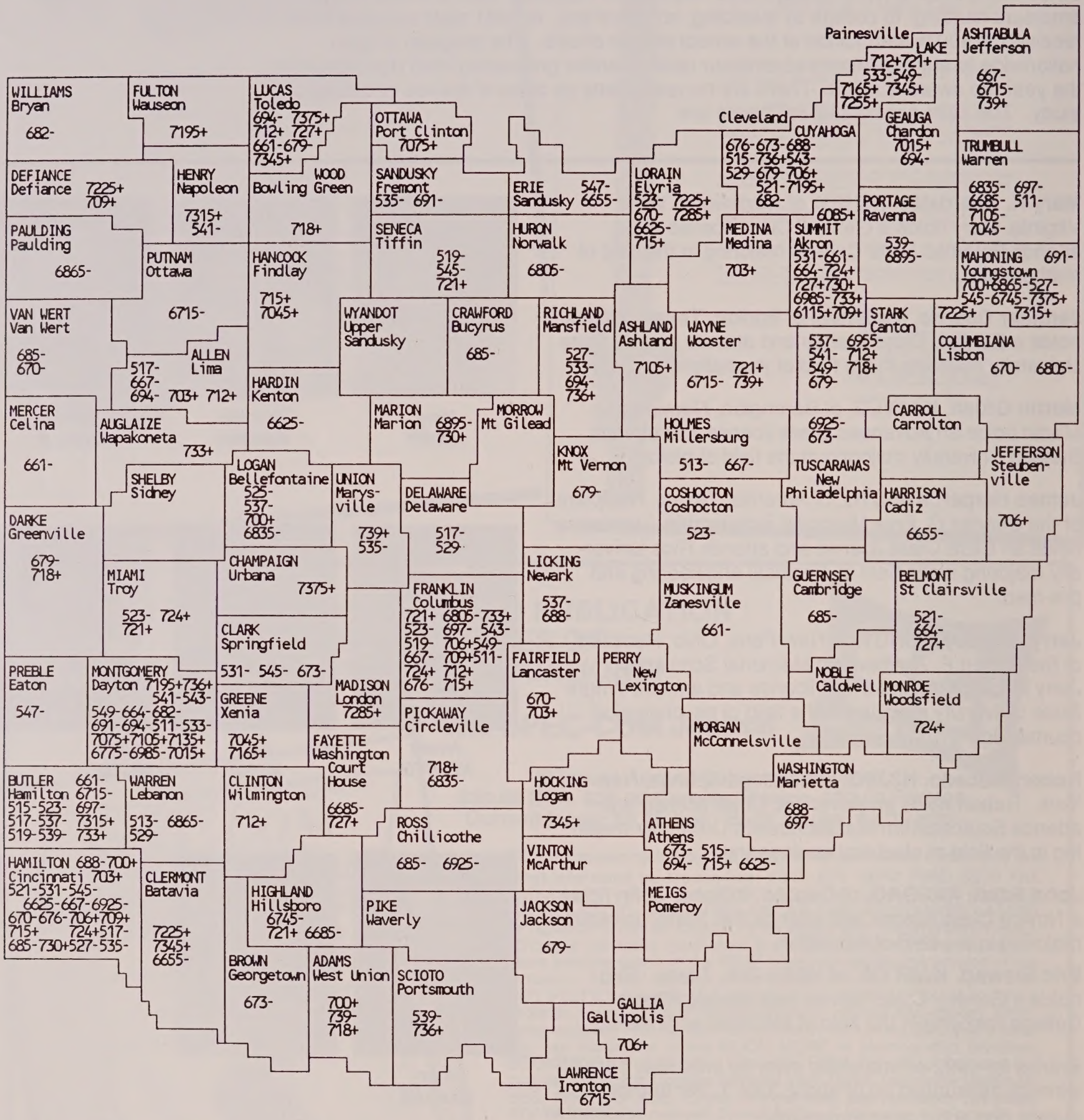
Robert
N2JXQ



John
KA9OAG

Eric
KA5YYW

Ohio 2 Meter Repeater Map



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OTTAWA Port Clinton 7075+
WOOD Bowling Green 718+
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LORAIN Elyria 523- 7225+ 670- 7285+ 6625- 715+
Cleveland
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Painesville
LAKE 712+721+ 533-549- 7165+ 7345+ 7255+
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TRUMBULL Warren 6835- 697- 6685- 511- 7105- 7045-
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6925- 673-
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DELAWARE Delaware 517- 529-
COSHOCTON Coshocton 523-
HARRISON Cadiz 6655-
DARKE Greenville 679- 718+
CHAMPAIGN Urbana 7375+
LICKING Newark 537- 688-
MIAMI Troy 523- 724+ 721+
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WASHINGTON Marietta 688- 697-
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HOCKING Logan 7345+
ROSS Chillicothe 685- 6925-
ATHENS Athens 673- 515- 694- 715+ 6625-
VINTON McArthur
HAMILTON Cincinnati 688-700+ 703+ 521-531-545- 6625-667-6925- 670-676-706+709+ 715+ 724+517- 685-730+527-535-
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SCIOTO Portsmouth 539- 736+
GALLIA Gallipolis 706+
LAWRENCE Ironton 6715-

WB8YUS

Send additions and corrections to WB8YUS using the 144.93 W8CQK BBS or 145.01 WA8WNI-1 BBS in Columbus, Ohio.

Your RX frequency is shown with a + or - sign to show the 600KHz. offset for TX. Example: 676 - is 146.76 RX and 146.16 TX.

Measurements

Hamvention

SATURDAY

1930-2230 - PREAMP/CONVERTER NOISE FIGURE MEASUREMENTS

Sponsored by the Midwest VHF/UHF Society.

Measurements will be made in the area adjacent to the FM B*A*S*H in the Hara Conference Center. Measurements will be performed from 144 thru 1296 MHz. Door prizes for top Homebrew entries. Measurements conducted by: Jerry Becker, WA8R and Norm Alred, WA8EUU and members of the Midwest VHF/UHF Society.

SUNDAY

0930-1300 - VHF/UHF ANTENNA GAIN MEASUREMENTS (Meadowdale High School)

Sponsored by the Midwest VHF/UHF Society.

Find out the "real" gain of your 144, 432, and 1296 MHz antennas. Homebrew and commercial category for each band. Prizes will be awarded. NOTE: Free shuttle bus service runs frequently from Hara Arena to nearby Meadowdale High School track/football field.

Measurement Team:

Joe Burke, WA8OGS
Terry Price, WD8ISK
Other Members of the Midwest VHF/UHF Society

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INTRODUCING THE ELPA-3/65 LOW PROFILE ANTENNA.

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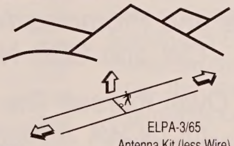

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Includes two EFU's
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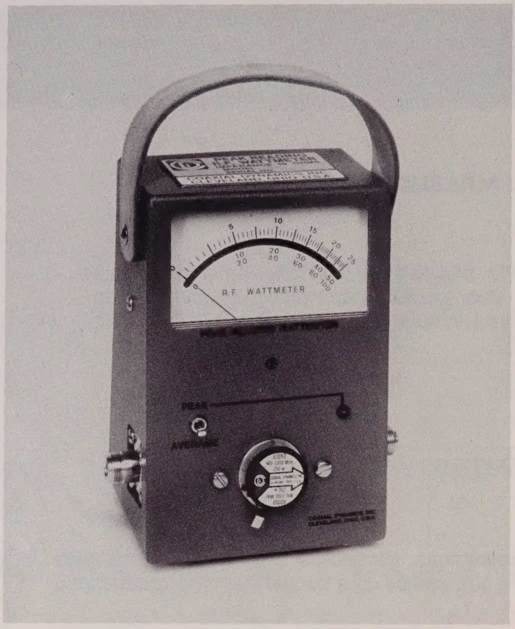

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Exhibitors

Hamvention

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Gracilis, Inc.	570,571
Grove Enterprises	514

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Class: General
County: Chittenden

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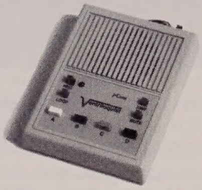

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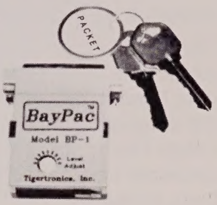

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and software TNC

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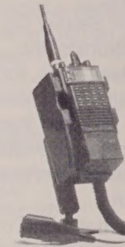

HT Safety Seat
Cradle and Swivel Mount

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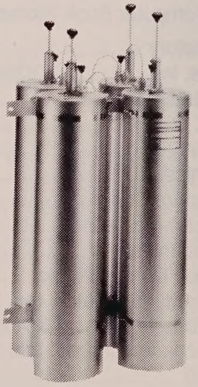
VARI-NOTCH® DUPLEXERS

FOR 2 METERS

The TX RX Systems Inc. patented Vari-Notch filter circuit, a pseudo-bandpass design, provides low loss, high TX to RX, and between-channel isolation, excellent for amateur band applications. TX RX Systems Inc. has been manufacturing multicoupling systems since 1976. Other models available for 220 and 440 MHz, UHF ATV and 1.2 GHz.

MODEL 28-37-02A
144-174 MHz
92 dB ISOLATION AT 0.6 MHz SEPARATION
400 WATT POWER RATING



19″ RACK MOUNT

TX RX SYSTEMS INC.
8625 INDUSTRIAL PARKWAY, ANGOLA, NY 14006
TELEPHONE 716-549-4700 FAX 716-549-4772 (24 HRS.)

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Exhibitors continued

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HAL Communications Corp.	248,249
Doug Hall Electronics	246,247
HALTEK Electronics	544,545
HamHEAVEN	118,119
Ham-Pro	546
Ham Radio Bookstore	068,069,078,079
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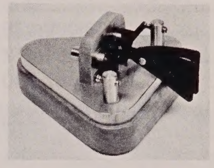
Hamvention

Previous Amateur of the Year Award Winners

1955 - William C. Jenney, W8FYW; Westlake, Ohio
Benjamin S. Zieg, W9EHU, K4OQK; Atlanta, Georgia
1956 - Edmund C. Ryan, W8LRR; Mansfield, Ohio
1957 - Ralph Crammer, W8VHO; Columbus, Ohio
1958 - Rev. C. Lynn White, K4CC; Tavarres, Florida
1959 - Harlow Lucas, W8QQ; Columbus, Ohio
1960 - Paul Wolfe, W8IVE; Cincinnati, Ohio
1961 - Ed Bonnet, W8OVG; Dayton, Ohio
1962 - Dana Cartwright, W8UPB ; Cincinnati, Ohio
1963 - Chester Funk, K8EUF, K7ZKL; Phoenix, Arizona
1964 - H. Ruble, W8PTF; Dayton, Ohio
1965 - Carl B. Snyder, W8ARW; Greenville, Ohio
1966 - Robert K. Caskey, W9DNQ; Indianapolis, Indiana
1967 - Jack Gray, W8JDV; Mason, Ohio
1968 - Elmer Schubert, W8ALW; Cincinnati, Ohio
1969 - Wayne Walters, W9DOG; Plainfield, Indiana
1970 - Kay Anderson, W8DUV; Huntington, West Virginia
1971 - Al Michel, W8WC; Cincinnati, Ohio
1972 - Don C. Miller, W9NTP; Waldron, Indiana
1973 - Ray E. Myers, W6MLZ; San Gabriel, California
1974 - Barry Goldwater, K7UGA; Scottsdale, Arizona
1975 - Richard A. Daniels, WA4DGU; Arlington, Virginia
1976 - Joseph M. Hertzberg, N3EA; Bryn Mawr, Pennsylvania
1977 - Rafael M. Estevez, WA4ZZG; Hialeah, Florida
1978 - Frank Schwab, W8OK; Dayton, Ohio
1979 - George G. Batterson, W2GB; Rochester, New York
1980 - Wayne Overbeck, N6NB; Woodland Hills, California
1981 - Eric C Shalkhauser, W9CI; Washington, Illinois
1982 - Robert G. Heil, Jr., K9EID; Marissa, Illinois
1983 - Katashi Nose, KH6IJ; Honolulu, Hawaii
1984 - Dave L. Bell, W6AQ; Los Angeles, California
1985 - John J. Willig, W8ACE; Sarasota, Florida
1986 - Roy Neal, K6DUE; Woodlawn Hill, California
1987 - Carole Perry, WB2MGP; Staten Island, New York
1988 - Bill Bennett, W7PHO; Seattle, Washington
1989 - Bill Pasternak, WA6ITF; Saugus, California
1990 - Stephen Mendelsohn, WA2DHF; Dumont, New Jersey
1991- John B. Johnston, W3BE; Derwood, Maryland

VIBROPLEX

"The Oldest Name In Amateur Radio"

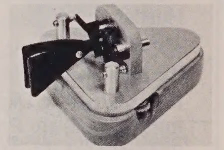


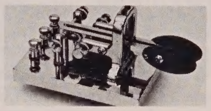
BRASS RACER IAMBIC

The newest addition to the Vibroplex family — the Brass Racer Iambic — A distinctive new design of Iambic paddle crafted from solid brass and mounted on a base of polished hardwood. No springs to fly off the middle of a contact. Superior Vibroplex quality. Always worth the difference and now a new Vibroplex look.

BRASS RACER EK-1

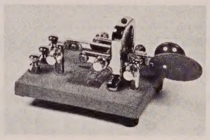
An even more exciting step is the new Brass Racer EK-1, an electronic keyer built into the base of our new Brass Racer Iambic paddle. Using the Curtis 8044 chip, this self-contained keyer and paddle is fully Iambic with dot/dash insertion and adjustable speed control. Use on either tube or solid state rigs. The perfect unit for mobile, DXpedition, or just plain fun.





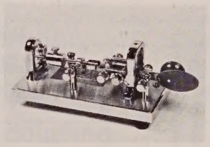
THE IAMBIC

The distinctive look and quality of the Vibroplex Original is fashioned into the finest Iambic paddle anywhere. The dual paddles allows the operator to utilize automatic dot/dash insertion and other unique features of the modern electronic keyer. Vibroplex distinction for the modern operator.



THE VIBROKEYER

The Vibrokeyer is designed for "Bug" operators who want to move to electronic keyers without relearning keying. The single lever paddle initiates the automatic dots and dashes of the electronic keyer with the same motion used to operate the "Bug". For those who want to combine traditional skill with modern electronics.



THE ORIGINAL

In 1890 Horace Martin searched for relief from the "glass arm" telegraph operators were getting from pounding the straight keys. His answer, the Vibroplex Original was an instant success. The vibrating lever bar automatically produces dots while dashes are made manually. Still popular today, the distinctive sound of the "Bug" can still be heard. It is the signature of the true C.W. expert.

HELLO TO ALL OUR FRIENDS IN DAYTON

Call or write for FREE Brochure.

THE VIBROPLEX CO., INC.

98 ELM STREET, PORTLAND, ME 04101

1-800-AMATEUR

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Exhibitors continued

Hamvention

Exhibitor	Booth No.
Radio Shack, Div. of Tandy Corp.	177,178,189,190
Radio Society Of Great Britain	514
The Radio Works, Inc.	130,131
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Startek International, Inc.	217,229
Surplus Sales of Nebraska	132-135
Telex Communications, Inc.	003-004
Ten-Tec, Inc.	549-551
Texas Bug Catcher Antennas / GLA Systems	566,567
Texas Radio Products	554,555
Transistor Sister & Co.	215
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TAPR: Tucson Amateur Packet Radio	542,543
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MAGAZINE

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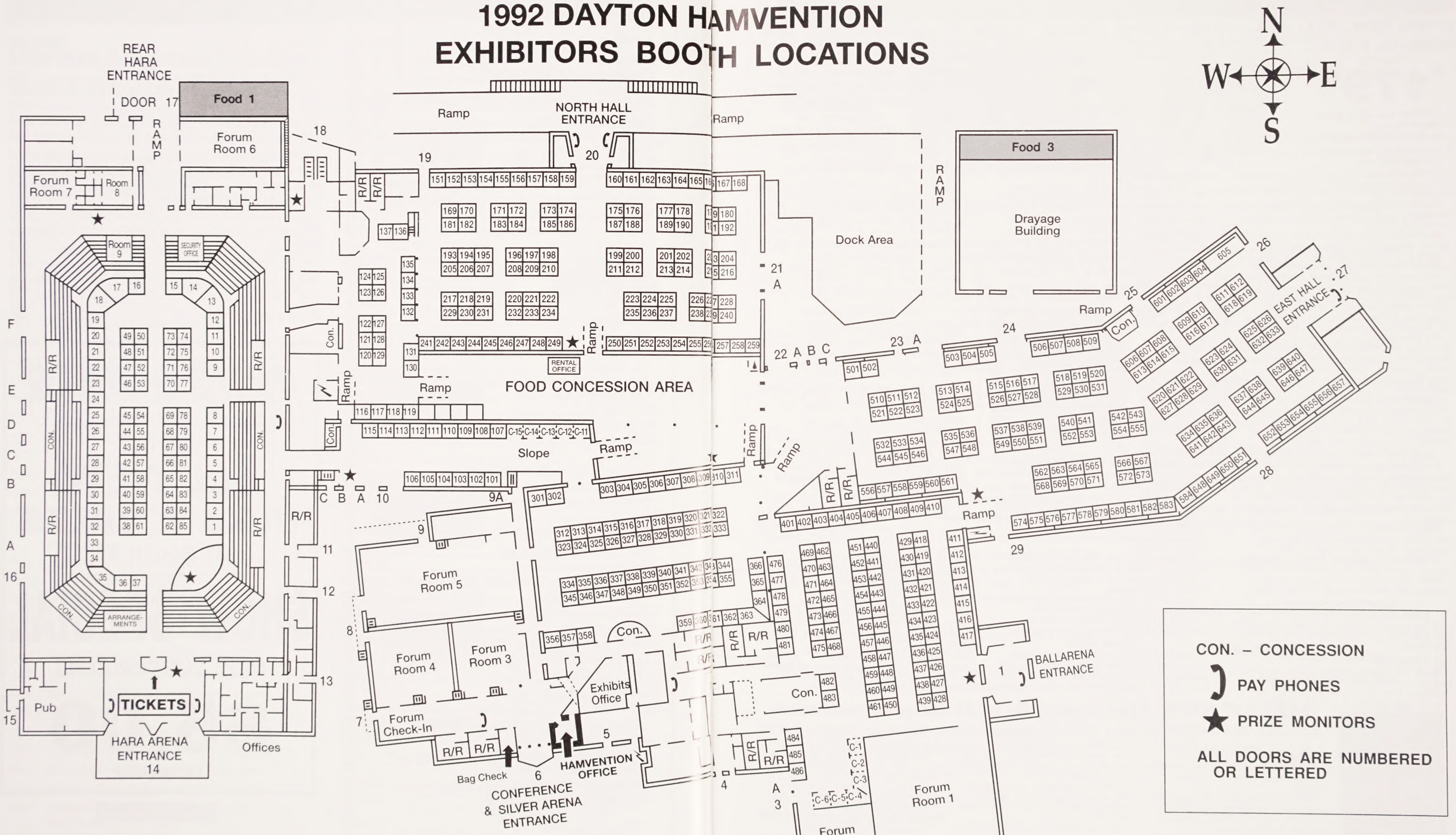
1992 DAYTON HAMVENTION EXHIBITORS BOOTH LOCATIONS



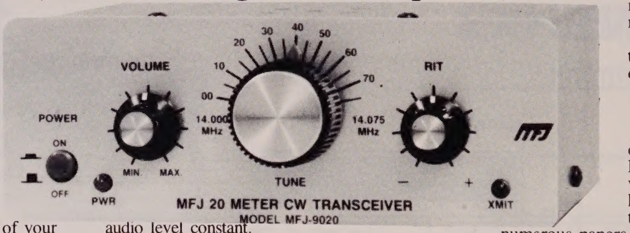
Come look over the new MFJ Goodies for 1992 at our Booths 62-64 and 83-85!

MFJ 20 Meter CW Transceiver

. . . throw this *tiny* CW rig in a corner of your briefcase and enjoy DXing and ragchewing wherever you go . . . you get a high performance superhet receiver, crystal filter, RIT, AGC, vernier tuning, sidetone, speaker, 5 watt transmitter, semi-break-in, more . . .

MFJ-9020
$179.95

- *15 Meter and other bands available soon*
- *Free MFJ-9020 manual*
- *Unconditional Guarantee for one full year*



Throw this tiny CW rig in a corner of your briefcase and enjoy DXing and ragchewing wherever you go.

You'll turn lonely nights into exciting adventures as you contact fellow amateurs around the world.

20 Meters is open day and night so you can operate whenever you have a free moment.

With 5 watts you'll have plenty of power to work the world even with a makeshift antenna.

At home with a good dipole, vertical or beam, you'll be able to work almost anyone you hear — can you imagine earning DXCC with 5 watts?

Big gun DX'ers: Try a new DX challenge for the price of a simple station accessory.

It's good enough to be your only rig — you get a high performance superhet receiver, razor sharp 8-pole crystal filter, RIT, AGC, vernier tuning, sinewave sidetone, built-in speaker, headphone jack, adjustable semi-break-in, up to 5 watts output plus much more.

Covers lower 20 Meter CW band, 14.000 to 14.075 MHz. 6x6½x2¼ inches. Weighs 1-3/4 lb. Uses 12-15 VDC. Optional plug-in Curtis chip keyer, narrow audio filter, antenna tuner, power pack and antenna.

High Performance Superhet Receiver

You get a high performance superhet receiver with a selective double tuned front end and double-balance mixer. It's sensitive enough to copy weak DX signals down to the noise floor yet resist overload when a strong local comes on.

What you hear is what you get — images and birdies are eliminated with this single conversion design and a high 10 MHz IF.

A ball bearing reduction drive and linear frequency readout gives you smooth precise tuning.

Half watt of audio gives you plenty of volume from headphones and built-in speaker.

Razor Sharp Selectivity

You'll slice through QRM and pull weak ones out of the mud with an 8-pole crystal filter that gives you razor sharp selectivity with steep sided skirts.

Automatic Gain Control (AGC)

Weak DX signals are just as loud as strong local ones because the MFJ-9020 *graceful* Automatic Gain Control (AGC) keeps your audio level constant.

You get smooth break-in operation because MFJ's exclusive *AGC Recovery Circuit*™ gives you *instantaneous* transmit recovery.

True Receiver Incremental Tuning (RIT)

True Receiver Incremental Tuning (RIT) lets you dodge QRM and compensate for the other station's drift without moving your transmit frequency.

MFJ *Integrated* CW Station

Transceiver, tuner, power pack* fastens together *to form tiny 6x6½x6¾ inch integrated CW station.

SAVE $30

MFJ-9120
$299.80

Save $30! $299.80 buys complete MFJ CW Station. Includes MFJ-9020 transceiver, MFJ-971 tuner, MFJ-4112 power pack, MFJ-1760 antenna . . . order MFJ-9120. $329.80 if purchased separately (Keyer and filter not included).

Enough Power to Work the World

With 5 watts you'll have plenty of power to work the world even with a makeshift antenna.

You can use any antenna with an SWR up to 3:1. The MFJ-9020 is rugged enough to withstand momentary antenna opens or shorts without damage.

If you're really into QRP you can reduce your power down to milliwatts.

A pleasing *sinewave* sidetone lets you monitor your sending.

You also get quiet adjustable semi-break-in and adjustable automatic transmit offset.

You'll get hours of battery operation — draws only 50 ma. receive, 1 amp transmit.

Looks Great!

The MFJ-9020 is housed in an attractive matte-black aluminum enclosure with a deluxe brushed-aluminum front panel and matched knob set. Machine screws and pressed-in PEM nuts are used — not sheet metal screws.

Has power-on LED, transmit LED and SO-239 coax connector for antenna.

Designed by Rick Littlefield, K1BQT

The MFJ-9020 was designed by Rick Littlefield, K1BQT. He's known worldwide for his reliable high-performance transceiver designs and numerous papers.

K1BQT has given careful attention to board layout, heatsinking, mechanical rigidity, voltage regulation and component selection to ensure stable operation and long-term reliability.

It meets or exceeds all FCC requirements.

Comes fully assembled, tested and guaranteed to work

Your factory built MFJ-9020 is ready to work DX right out of the box. It's not a kit of parts you have to put together and hope you can get to work.

Free MFJ-9020 Manual

Manual includes operating instructions, setting up your station, DX techniques, antenna suggestions, trouble shooting guide, theory of operation, alignment procedures, parts placement, schematic, parts list and more.

For *free* MFJ-9020 manual write or call MFJ.

Plug-in Keyer and Narrow Filter (Optional)

MFJ-412 Curtis chip iambic keyer, $39.95.

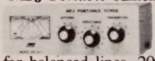
MFJ-726 narrow audio filter, $29.95. Has In/Out switch.

Each plugs into MFJ-9020. Controls on rear panel. No soldering or modifications needed.

MFJ *Portable* Operating Accessories

MFJ *Portable* Antenna Tuner has Cross-Needle SWR/Wattmeter, covers 1.8-30 MHz, balun for balanced lines, 200 watts PEP. Tunes coax, balanced lines, random wire. Wattmeter has two ranges. Tiny 6x6½x2¼ inches matches MFJ-9020. Fastens to MFJ-9020 and/or MFJ-4112 Power Pack to form single unit.

MFJ-971 **$79.95**



MFJ *Portable* Power Pack Battery/AC Power Pack for MFJ-9020 or other low power transceiver. Provides 12 VDC from eight D cells (not included) or from 110 VAC. 6x6½x2¼ inches matches MFJ-9020. Fastens to MFJ-9020 and/or MFJ-971 Portable Antenna Tuner to form single unit.

MFJ-4112 **$39.95**

MFJ *Portable* Antenna Efficient 20 Meter dipole. Lightweight, easy to carry, easy to put up. Perfect for portable operation with MFJ-9020.

MFJ-1760 **$29.95**

MFJ-247 SWR Analyzer™ with LCD frequency counter

MFJ's newest SWR Analyzer™ has built-in 10 digit LCD frequency counter – makes reading SWR easier than ever.

MFJ-247
$189.95

You can use the new MFJ-247 as an SWR Analyzer™ or as a sensitive high accuracy 150 MHz frequency counter.

It has high contrast LCD digits that don't wash out in bright sunlight like LEDs do -- they're actually easier to read the brighter the sun.

Reading SWR is automatic. All you do is plug in your antenna, set your MFJ SWR Analyzer™ to the frequency you want and read your SWR -- it couldn't be easier!

The MFJ-247 is battery operated and handheld size so you can take it right to your antenna and work on it until it's just the way you want it. Reads SWR from 160 thru 10 Meters.

You can instantly find your antenna's true resonant frequency right at your feedline -- that's something a noise bridge just can't do.

You can monitor how SWR changes as you adjust your beam or vertical -- you'll know right away which way to adjust it.

You can shorten or lengthen your dipole and see the effect immediately.

You'll find all kinds of uses for this totally self-contained handheld unit that has revolutionized how SWR is measured.

Has separate BNC input connector for use as high accuracy frequency counter. Counter has 1 ppm 10 MHz crystal time base; .01, .1, 1, 10 second gate times; .1 Hz resolution. Uses 6 AA cells or 110 VAC with MFJ-1312, $12.95. 4x1¾x7½ in.

Nearest Dealer/Orders: 800-647-1800
Technical Help: 800-647-8324

MFJ

MFJ ENTERPRISES, INC.
Box 494, Miss. State, MS 39762
(601) 323-5869; **TELEX:** 53 4590
FAX: (601) 323-6551

MFJ . . . making quality affordable

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Flea Market Information

Flea Market spaces are NOT selected on a first come, first served basis. The selection, with computer assistance, will be based on an equitable allocation of available spaces.

Flea Market spaces obtained for the purpose of parking individual vehicles does not comply with the intent of the Hamvention Flea Market operation. Such vehicles may be removed by the Hamvention Committee.

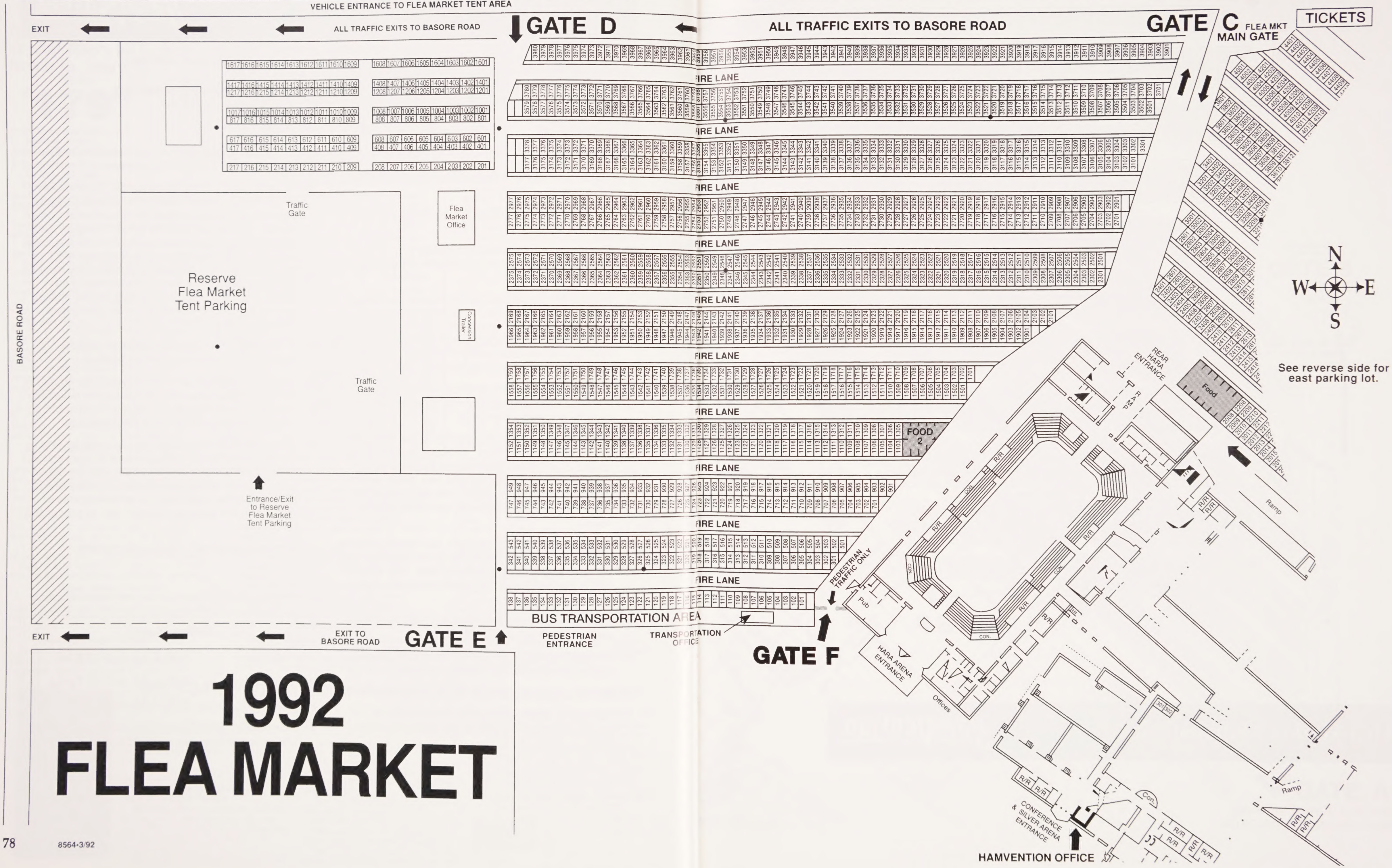
General Rules

1. Vending or trading is not authorized outside of the selling hours.
2. No self-contained vehicles are permitted in the flea market.
3. The standard space is approximately 9' x 18' and no vehicle or set-up may exceed the designated area.
4. Flea Market spaces are for the express purpose of selling or trading amateur radio, electronic or related equipment and supplies. Flea Market spaces which are not being used for selling or trading may be reclaimed by HAMVENTION Flea Market personnel and reassigned.
5. Security personnel will be in the area. However, HAMVENTION can not be responsible for the security of individual property.
6. Vehicular traffic in the flea market will be extremely limited during open hours. Vehicular access to your spaces during open hours will be by permission of Flea Market personnel only and may not be available at all during busy times. We recommend that you arrive early enough to set-up before opening hours.
7. Bicycles, skateboards, mopeds, non-HAMVENTION golf carts or other similar forms of transportation are not permitted in the Flea Market area. Any exception to this policy must be authorized by the Flea Market Committee.
8. Food and beverage sales by other than Hara Arena are not permitted on the premises.
9. No open flames or any other potential fire hazard will be permitted in the Flea Market area.
10. No camping is permitted in the Flea Market area.
11. No paging other than medical emergencies is permitted in the Flea Market due to zoning restrictions.
12. No firearms or weapons are permitted in the Flea Market for sale or any other purpose.
13. FLEA MARKET SPACES ARE NOT TRANSFERABLE !!! If you have Flea Market spaces that you can not use, please contact the Flea Market Committee. We will probably be able to reassign them. Illegal trading of spaces to create Flea Market areas larger than the three allowed spaces may result in your removal. Any exceptions to this policy must be approved by the Flea Market Committee in advance. The complete listing of Flea Market spaces is used for locating individuals in an emergency during the show.
14. A HAMVENTION general admission ticket is required for entrance to the Flea Market.
15. The use of portable generators in the Flea Market is strongly discouraged. Any conflict which develops over noise or fumes will be resolved in favor of the individuals being disturbed by the generator.
16. Any violation of these rules may be used by Flea Market personnel to justify removal of any vendor. These rules are required to comply with fire department, security and some common courtesy needs. We request the cooperation of all participants to help make this show as pleasant and as successful as possible.
17. NO vehicles will be parked under the tent.

Selling Hours:

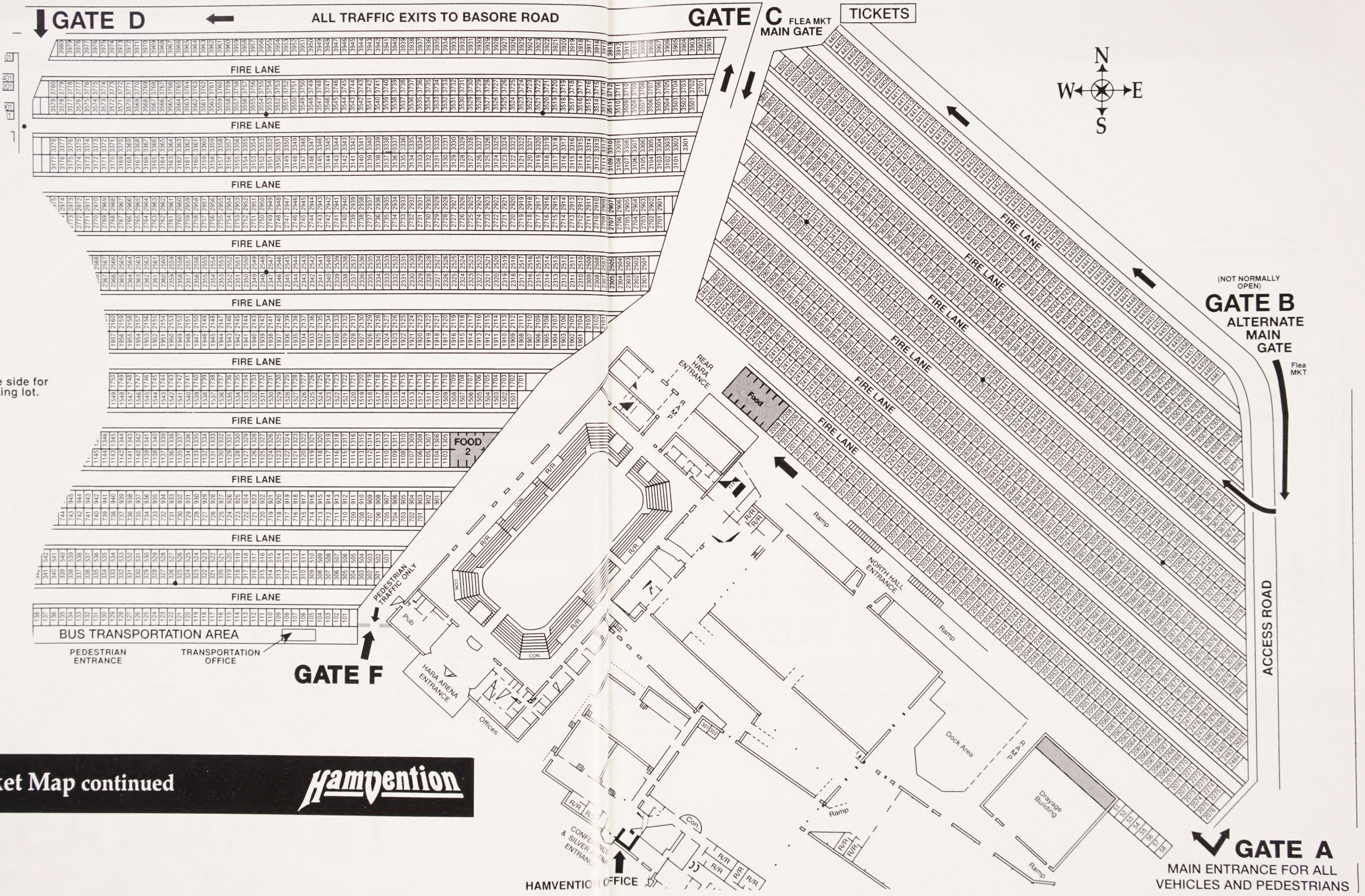
Friday:	8:00 A.M. to 6:00 P.M.
Saturday:	6:00 A.M. to 5:00 P.M.
Sunday:	6:00 A.M. to 4:00 P.M.

1992 FLEA MARKET



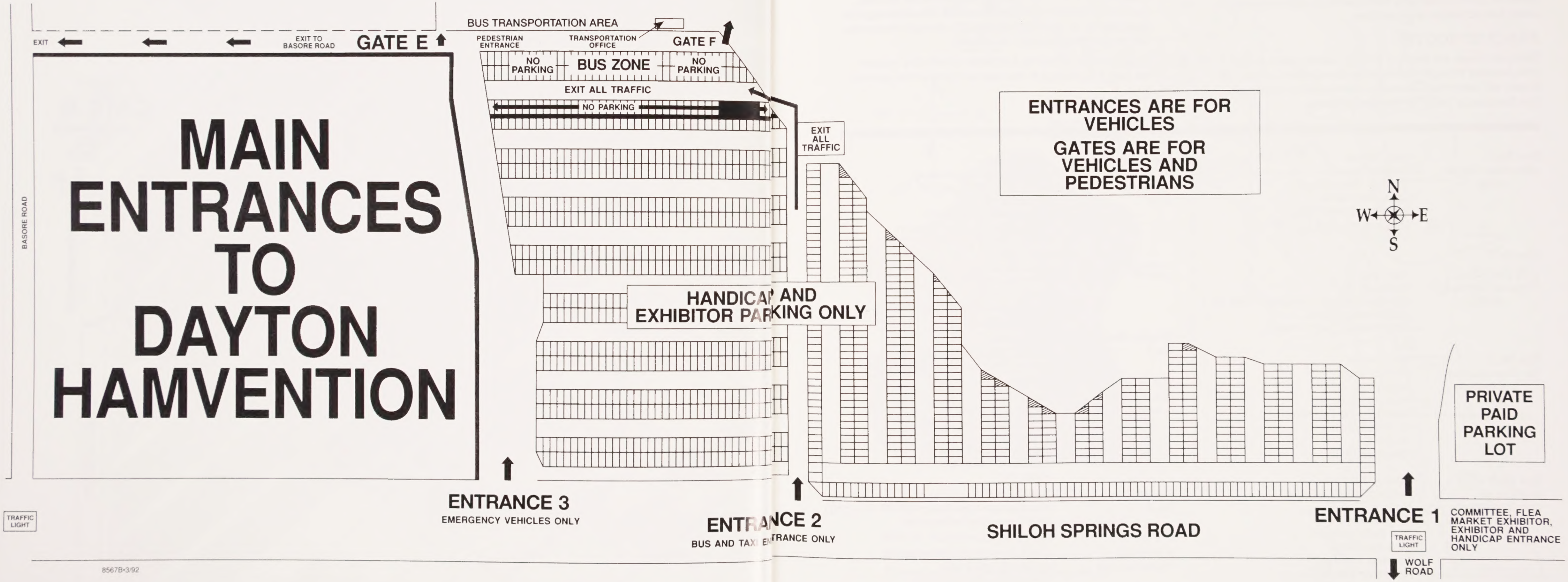
Flea Market Map continued

Hamvention



See reverse side for west parking lot.

Main Entrance Map



Free Hamvention Buses

(FRIDAY, SATURDAY, SUNDAY) Look for Route Number in Bus Windshield

	First Arrival at Hara	Last Departure from Hara
Friday	8:00 A.M.	6:00 P.M.
Saturday	6:00 A.M.	5:00 P.M.
Sunday	6:00 A.M.	5:00 P.M.

Buses will run continuously and make routes as quickly as possible. Due to changing traffic patterns and bus loads, an exact bus schedule is impossible.

BANQUET ROUTES

Banquet buses will begin at the first pick-up point at 5:45 P. M. and proceed through the routes to Convention Center. All buses will leave the Convention Center at the conclusion of the Banquet to return to the pick-up points.

NOTES

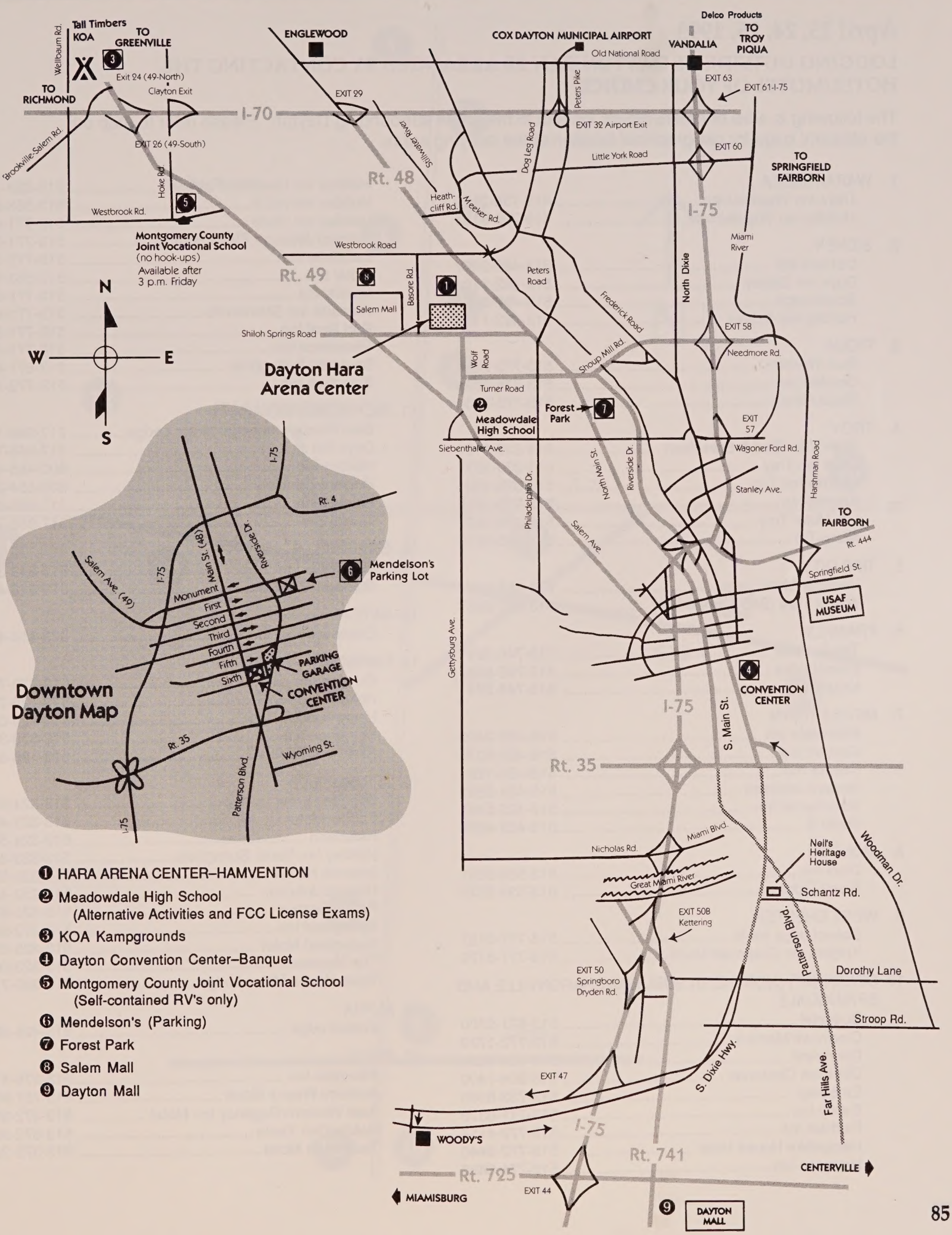
1. Near the end of each day, off-site visitors who rely on bus service to *return* to Hara Arena, should return to Hara Arena at least one hour prior to the "Last Departure from Hara" time shown. The last bus routes each day are outbound only from Hara.
2. Buses at the 5:00 P.M. Saturday departure are typically very heavily loaded. Banquet attendees are encouraged to leave earlier on Saturday, arrange for alternate transportation, or to expect crowded conditions.
3. If your hotel is not on the list below, refer to the map on the rear and proceed to the nearest Hamvention parking area.

Bus No.1 *(Downtown Dayton Area)*		Hara Arena Knights Court Days Inn Downtown Daytonian Hilton Stouffers Center Plaza
	(P)	Mendelson's Surplus ❻
		Marriott Inn
Bus No.2 *(I-75 Exit 57-B Wagoner Ford Road Area)*		Hara Arena Radisson Inn Holiday Inn North (Wagoner Ford Rd.) EconoLodge North Best Western North Plaza
Bus No.3 *(Air Force Museum and Fairborn Area)*		Hara Arena 8 Inn of Dayton Holiday Inn I-675 Homewood Suites Red Roof Inn Fairborn Air Force Museum Best Inn Riverside Motel
Bus No.4 *(I-75 Exit 60 Little York Road Area)*		Hara Arena Fairfield Inn by Marriot Motel 6 Knights Inn North Red Roof Inn North Days Inn North Ramada Inn North Rodeway Inns North Residence Inn North
Bus No.5 *(KOA - JVS)*		Hara Arena Montgomery County Joint Vocational School ❺ Dayton Tall Timbers Resort KOA ❸
No. 5A		Brookville Days Inn
Bus No. 6 *(I-75 Exit 44 Dayton Mall Area)*		Hara Arena Red Roof Inn Miamisburg Knights Inn (I-75 and SR 725) Signature Inn Days Inn Dayton South Continental Inn/Best Western Holiday Inn (I-75 and SR 725) Courtyard Guest Quarters Suites Residence Inn South Motel 6 South
	(P)	Dayton Mall (Front outer lot) RTA Park-N-Ride ❾
Shuttle Bus No.7		Hara Arena
	(P)	Forest Park Parking Area ❼ ***Front lot - Pick-up point (overflow in rear)***
Bus No.8 *(South Dayton Area)*		Hara Arena Comfort Inn Holiday Inn South Econolodge South Kettering Inn Red Horse Motor Inn Traveller's Motel (South) Relax Inn
Shuttle Bus No. 9		Hara Arena Meadowdale High School (Sat & Sun only) Wolf Road Pay Parking Lots
Bus No.10 *(I-70 Exit 29 Englewood Area*		Hara Arena Cross Country Inn (Englewood) Motel 6 (Englewood) Holiday Inn (Englewood) Hampton Inn (Englewood)
Shuttle Bus No. 11		Hara Arena
	(P)	Salem Mall (Northwest Corner - rear lot) ❽
Bus No.12 *(Vandalia)*		Hara Arena Ho Jo Inn Dayton Airport Hotel Cross Country Inn (Vandalia) Scottish Inn

(P) = Parking Areas

Dayton Area Map

Hamvention



1. ❶ HARA ARENA CENTER–HAMVENTION
2. ❷ Meadowdale High School (Alternative Activities and FCC License Exams)
3. ❸ KOA Kampgrounds
4. ❹ Dayton Convention Center–Banquet
5. ❺ Montgomery County Joint Vocational School (Self-contained RV's only)
6. ❻ Mendelson's (Parking)
7. ❼ Forest Park
8. ❽ Salem Mall
9. ❾ Dayton Mall

1993 Regional Lodging

April 23, 24, 25, 1993

LODGING OUTSIDE OF DAYTON CAN BE ARRANGED BY CONTACTING THE HOTEL/MOTEL OF YOUR CHOICE.

The following is a list of hotels/motels located in the areas surrounding Dayton. Please refer to map on the adjacent page for geographical location of the outlying areas.

1. WAPAKONETA

Days Inn Wapakoneta	419-738-2184
Holiday Inn Wapakoneta	419-738-8181

2. SIDNEY

Comfort Inn	513-492-3001
Days Inn Sidney	513-492-1104
Econolodge	513-492-9164
Holiday Inn Sidney	513-492-1131

3. PIQUA

Best Western	513-773-2314
Comfort Inn	513-778-3001
Piqua Motel	513-773-3234

4. TROY

Allen Villa (Bed & Breakfast)	513-335-1181
Days Inn Troy	513-339-7571
Holiday Inn Troy	513-335-0021
Knights Inn	513-339-1515
L-K Motel Troy	513-335-0071
Micro-Tel	513-335-0013

5. TIPP CITY

Heritage Motel	513-667-2481
Willow Tree (Bed & Breakfast)	513-667-2957

6. FRANKLIN

The Cavalier	513-746-3961
EconoLodge	513-746-3627
Knights Inn	513-746-2841

7. MIDDLETOWN

Affordable Inn	513-423-9403
Comfort Inn	513-420-9378
Holiday Inn	513-424-1201
Howard Johnson	513-424-3551
Manchester Inn	513-422-5481
Super 8	513-422-4888

8. MONROE

Days Inn	513-539-9221
Stony Ridge	513-539-9247

9. WEST CHESTER

EconoLodge North	513-777-5121
Knights Inn Cincinnati North	513-777-5170

10. CINCINNATI (NORTHERN SUBURBS/SHARONVILLE AND SPRINGDALE

Budgetel	513-671-2300
Cincinnati Marriott	513-772-1720
Courtyard	513-733-4334
Days Inn Cincinnati	513-554-1400
Embassy	513-733-8900
Envoy Inn	513-771-0370
Fairfield Inn	513-772-4114
Hampshire House Hotel	513-772-5440
Hampton Inn	513-771-6888
Holiday Inn Hamilton/Fairfield	513-829-7000
Holiday Inn I-275	513-563-8330
Holiday Inn North	513-771-0700
Howard Johnson Plaza Hotel	513-771-3400
LaQuinta Inn	513-772-3140
Motel 6	513-563-1123
Quality Inn	513-771-5252
Ramada Inn Sharonville	513-771-0300
Red Roof Inn	513-771-5141
Residence Inn	513-771-2525
Sheraton Springdale	513-671-6600
Signature Inn	513-772-7877

11. RICHMOND, INDIANA

Best Western Imperial Motor Lodge	317-966-1505
Days Inn	317-966-7591
Holiday Inn	800-465-4329
Howard Johnson	800-654-2000
Knights Inn	317-966-6682
Quality Inn	317-966-7511

12. GREENVILLE

Greenville Inn	513-548-3613
Stardust Motel	513-548-4154

13. EATON

EconoLodge	513-456-4183

14. FAIRBORN

Comfort Inn	513-879-7666
Holiday Inn I-675	513-426-7800
Homewood Suites	513-429-0600
Patterson Inn	513-879-3920
Red Roof Fairborn	513-426-6116

15. SPRINGFIELD

Days Inn West	513-324-5561
Fairfax Motel	513-323-4915
Heartland	513-324-5601
Holiday Inn South Springfield	513-323-8631
Imperial House	513-324-5501
Howard Johnson	513-322-4942
Parke Terrace	513-325-8721
Springfield Inn	513-322-3600
Springfield Motel	513-325-6991
The Meadows	513-323-0872
Town House Motor Lodge	513-325-7661

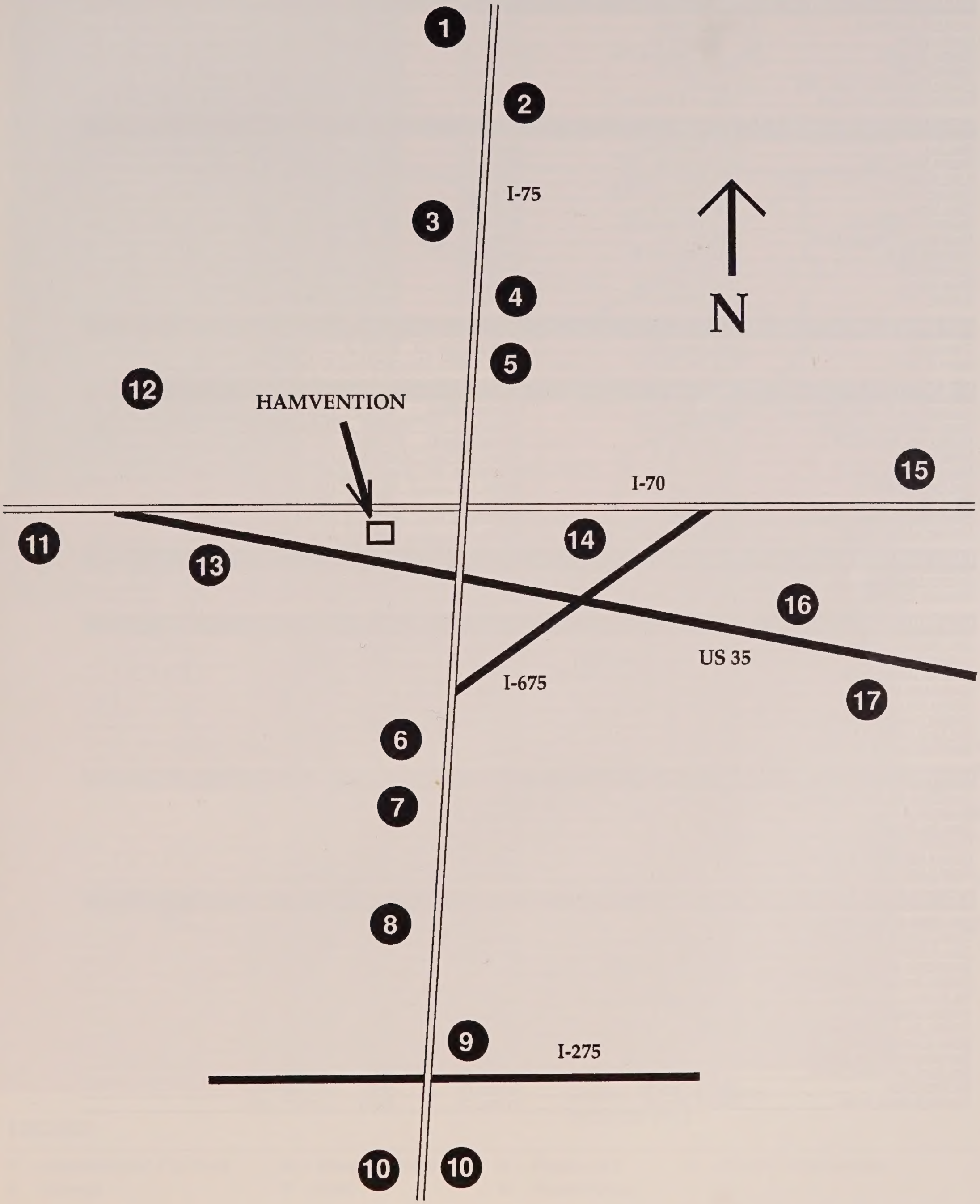
16. ALPHA

EconoLodge	513-426-5822

17. XENIA

Allendale Inn	513-376-8124
Anthony Wayne Motel	513-767-9004
Best Western/Regency Inn Motel	513-372-9954
Holiday Inn Xenia	513-372-9921
Tecumseh Motel	513-372-2512

Regional Lodging Map



Dayton Area Lodging

DOWNTOWN (Section "I" on map)

Days Inn Downtown	330 W First St	Dayton, OH	45402	(513)223-7131	H M R L A P
Dayton Hilton	11 S Ludlow St	Dayton, OH	45402	(513)461-4700	H M R L A W
Dayton Marriott	1414 S Patterson Blvd	Dayton, OH	45409	(513)223-1000	H M R L A P W
Knights Court	404 W First St	Dayton, OH	45402	(513)224-9911	H M A P W
Price's Steamboat House B&B	6 Josie St	Dayton, OH	45403	(513)223-2444	M R A
Stouffer Center Plaza Hotel	E Fifth & S Jefferson St	Dayton, OH	45402	(513)224-0800	H M R L A P W

I-75 NORTHEAST (Section "II" on map)

Best Inn	5551 Springfield St	Dayton, OH	45431	(513)258-2233	H
Dayton Motor Hotel	639 Keowee St	Dayton, OH	45404	(513)222-5518	
8 Inn of Dayton	1891 Harshman Rd	Dayton, OH	45424	(513)236-8083	
Holiday Inn North	2301 Wagoner Ford Rd	Dayton, OH	45414	(513)278-4871	H M R L P W
Plaza Motel	1728 Stanley Ave	Dayton, OH	45404	(513)224-1266	
Radisson Inn Dayton	2401 Needmore Rd	Dayton, OH	45414	(513)278-5711	H M R L A P W
Residence Inn Dayton North	7070 Poe Ave	Dayton, OH	45414	(513)898-7764	H M P
Riverside Motel	5441 Springfield St	Dayton, OH	45431	(513)254-9700	M A
Rodeway Inn	575 Poe Ave	Dayton, OH	45414	(513)454-0550	H M L A P
Royal Motel	1450 N Keowee St	Dayton, OH	45404	(513)224-9636	H A
Scottish Inns	845 E National Rd	Vandalia,OH	45377	(513)898-5871	H A P

I-70 EAST (Section "II" on map)

Travelodge	7911 Brandt Pk	Huber Heights, OH	45424	(513)236-9361	P
Super 8 Motel	8110 Old Troy Pk	Huber Heights, OH	45424	(513)237-1888	H

I-75 SOUTHEAST (Section "III" on map)

Courtyard by Marriott Dayton Mall	100 Prestige Place	Miamisburg, OH	45342	(513)433-3131	H M R L A P W
Guest Quarters Suite Hotel	300 Prestige Place	Miamisburg, OH	45342	(513)436-2400	H M R L P W
Holiday Inn Dayton Mall	31 Prestige Plaza	Miamisburg, OH	45342	(513)434-8030	H M R L P
Kettering Inn	2700 S Dixie Dr	Dayton, OH	45409	(513)298-1411	M L
Motel 6 Dayton South	8101 Springboro Pk	Miamisburg, OH	45342	(513)434-8750	H P
Red Horse Motor Inn	4625 S Dixie Dr	Dayton, OH	45439	(513)294-7500	P
Relax Inn	3333 S Dixie Dr	Dayton, OH	45439	(513)299-3581	H
Residence Inn Dayton South	155 Prestige Place	Miamisburg, OH	45342	(513)434-7881	H P
Traveler's Motel South	4503 S Dixie Dr	Dayton, OH	45439	(513)293-4111	P

I-675 SOUTHEAST (Section "III" on map)

Country Hearth Inn	1944 Miamisburg-Centerville Rd	Dayton, OH	45459	(513)435-1550	H M P
Hampton Inn South	8099 Old Yankee St	Dayton, OH	45458	(513)436-3700	H M P W

I-75 SOUTHWEST (Section "IV" on map)

Best Western Continental Inn	155 Monarch Ln	Miamisburg, OH	45342	(513)866-5500	H M R L
Comfort Inn	2140 S Edwin C Moses Blvd	Dayton, OH	45408	(513)223-0166	M L A P
Days Inn Dayton South	3555 Miamisburg-Centerville Rd	Dayton, OH	45449	(513)847-8422	H M R L A P W
Econolodge South	2450 Dryden Rd	Moraine, OH	45439	(513)298-0380	R L P
Holiday Inn South	2455 Dryden Rd	Moraine, OH	45439	(513)294-1471	H M R L P W
Knights Inn Dayton South	185 Byers Rd	Miamisburg, OH	45342	(513)859-8797	M P
Red Roof Inn Miamisburg	222 Byers Rd	Miamisburg, OH	45342	(513)866-0705	
Signature Inn Dayton South	250 Byers Rd	Miamisburg, OH	45342	(513)865-0077	H M P

I-70 WEST (Section "V" on map)

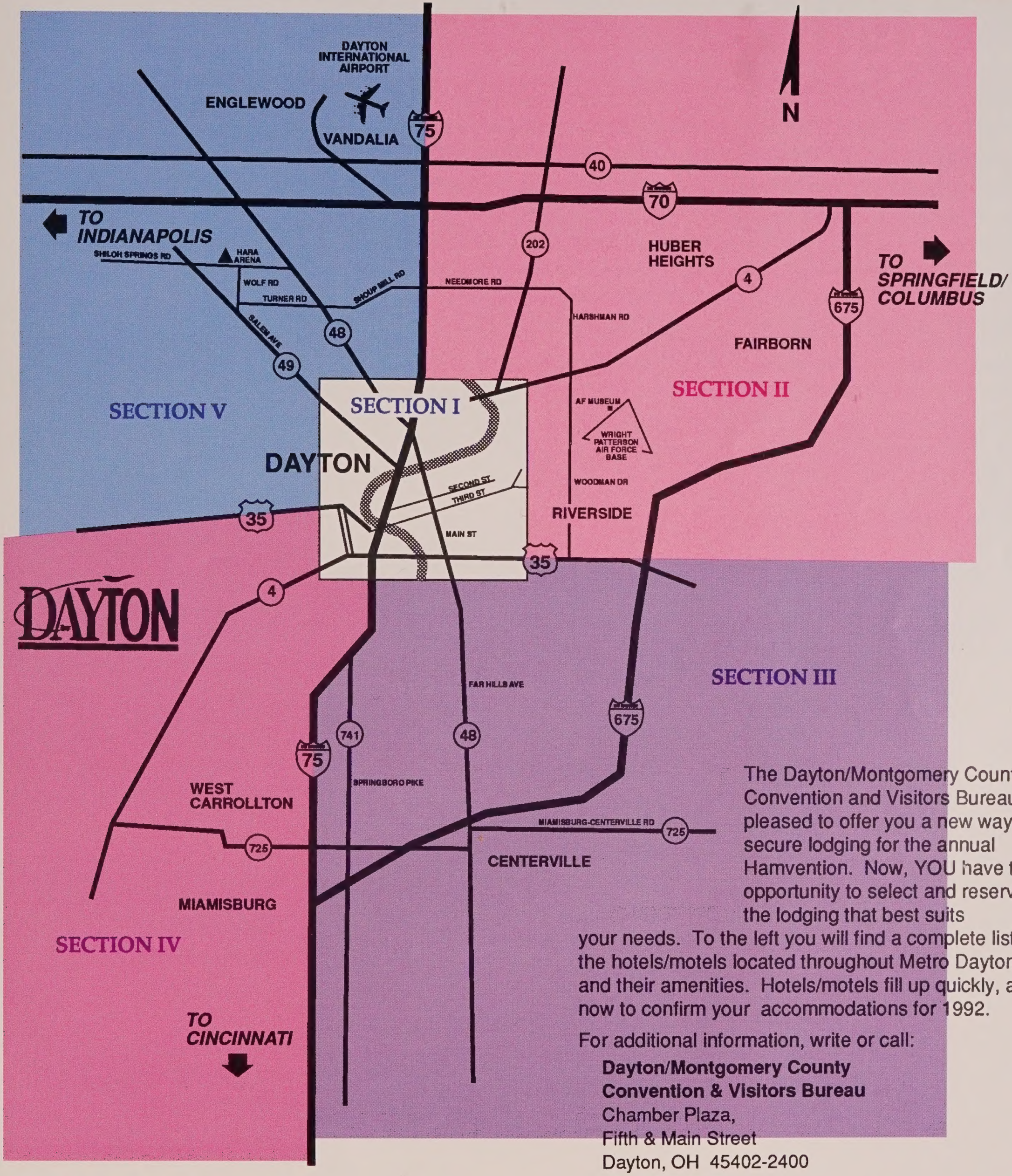
Cross Country Inn Englewood	9325 N Main St	Dayton, OH	45415	(513)836-8339	H P
Dayton Airport Inn	Dayton Intl Airport	Vandalia, OH	45377	(513)898-1000M	R A P
Days Inn Brookville	100 Parkview Dr	Brookville, OH	45309	(513)833-4003	H
Hampton Inn North	20 Rockridge Rd	Englewood, OH	45322	(513)832-2222	H M A W
Holiday Inn Dayton Northwest	10 Rockridge Rd	Englewood, OH	45322	(513)832-1234	H M R L A P
Motel 6 Dayton Northwest	1212 S Main St	Englewood, OH	45322	(513)832-3770	H P

I-75 NORTHWEST (Section "V" on map)

Best Western North Plaza Inn	3636 N Dixie Dr	Dayton, OH	45414	(513)276-6151	M R P
Cross Country Inn Vandalia	550 E National Rd	Vandalia, OH	45377	(513)898-7636	H P
Days Inn North	7470 Miller Ln	Dayton, OH	45414	(513)898-4946	P
Econolodge North	2221 Wagoner Ford Rd	Dayton, OH	45414	(513)278-1500	H A P
Fairfield Inn by Marriott	6960 Miller Ln	Dayton, OH	45414	(513)898-1120	H M P
Ho Jo Inn	75 Corporate Center Dr	Vandalia, OH	45377	(513)898-8321	H M R L A P
Holiday Aire Motel	4101 Keats Rd	Dayton, OH	45414	(513)274-1116	H L
Knights Inn Dayton North	3663 Maxton Rd	Dayton, OH	45414	(513)898-1212	M P
Motel 6 Dayton North	7130 Miller Ln	Dayton, OH	45414	(513)898-3606	H P
Ramada Inn Dayton North	4079 Little York Rd	Dayton, OH	45414	(513)890-9500	H M R L A P
Red Roof Inn Dayton North	7370 Miller Ln	Dayton, OH	45414	(513)898-1054	
35 West Motel	7040 W Third St	Dayton, OH	45427	(513)835-5965	
Traveler's Motel North	2833 N Dixie Dr	Dayton, OH	45414	(513)277-6585	

Area Lodging Map

Hamvention



The Dayton/Montgomery County Convention and Visitors Bureau is pleased to offer you a new way to secure lodging for the annual Hamvention. Now, YOU have the opportunity to select and reserve the lodging that best suits your needs. To the left you will find a complete list of the hotels/motels located throughout Metro Dayton and their amenities. Hotels/motels fill up quickly, act now to confirm your accommodations for 1992.

For additional information, write or call:

Dayton/Montgomery County
Convention & Visitors Bureau
Chamber Plaza,
Fifth & Main Street
Dayton, OH 45402-2400
(513) 223-2612

LEGEND

H - Handicapped Facilities
L - Lounge
M - Meeting Room
P - Pool
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W - Health Club
A - Airport Limo Service

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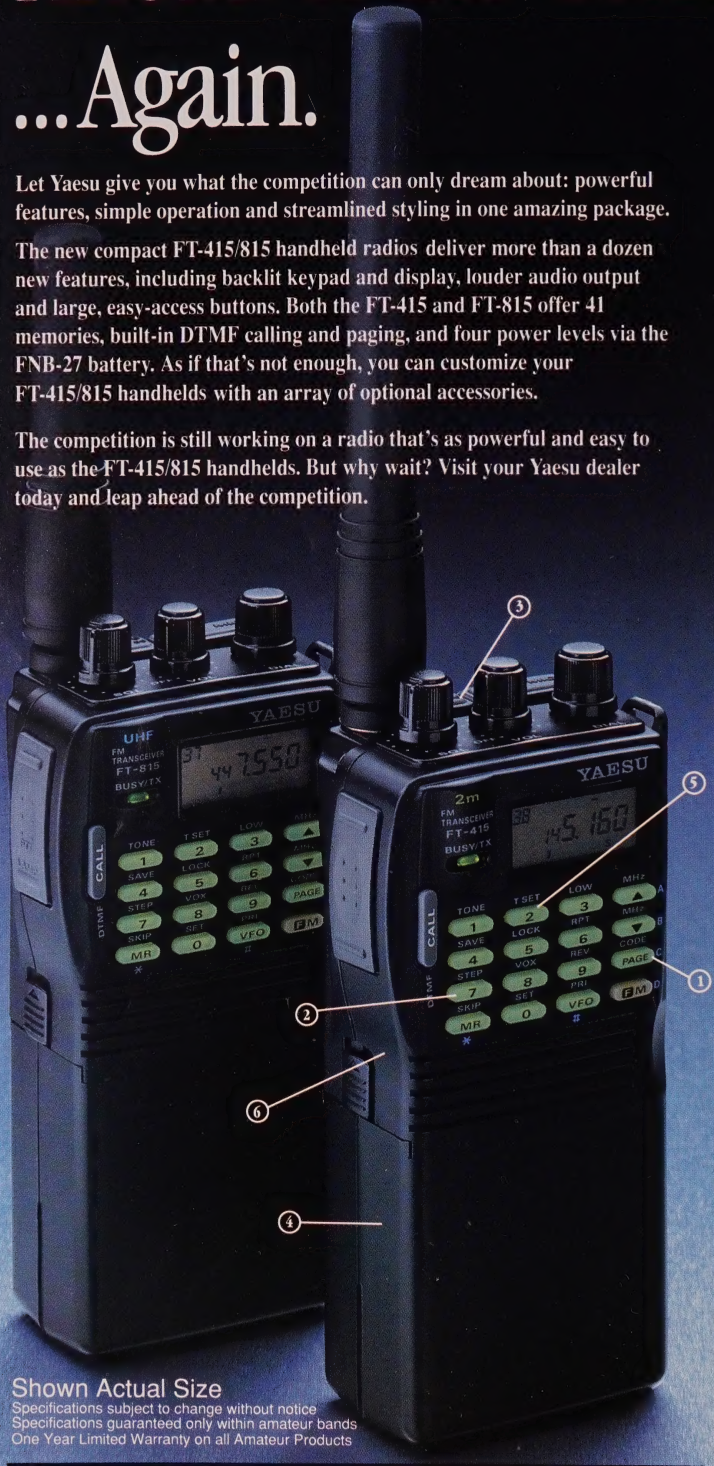
Ahead of the Competition...

...Again.

Let Yaesu give you what the competition can only dream about: powerful features, simple operation and streamlined styling in one amazing package.

The new compact FT-415/815 handheld radios deliver more than a dozen new features, including backlit keypad and display, louder audio output and large, easy-access buttons. Both the FT-415 and FT-815 offer 41 memories, built-in DTMF calling and paging, and four power levels via the FNB-27 battery. As if that's not enough, you can customize your FT-415/815 handhelds with an array of optional accessories.

The competition is still working on a radio that's as powerful and easy to use as the FT-415/815 handhelds. But why wait? Visit your Yaesu dealer today and leap ahead of the competition.



Shown Actual Size

Specifications subject to change without notice
Specifications guaranteed only within amateur bands
One Year Limited Warranty on all Amateur Products

FT-415/815

2M/UHF Handheld Transceivers

FT-415: 130-174 MHz Rx 140-150 MHz Tx

FT-815: 430-450 MHz Rx/Tx

41 Memories (All memories store separate transmit and receive frequencies for "odd splits")

2 VFOS

① DTMF Calling and paging built-in

Built-in VOX

② Back-lit Keypad and Display (with time delay)

③ DC Direct Operation (Automatically Charges Battery with 12 Volts, FNB-25 only)

④ Four Power Levels (With FNB-27 Battery)

Direct Keyboard Entry for All Functions

Programmable and Automatic Battery Saver (ABS)

⑤ CTCSS Encode/Decode Built-In

5 Watts Output With FNB-27 or DC Direct

⑥ Rugged Case Construction

Automatic Power-Off (APO) Turns Radio Off Automatically After 30 Minutes

DTMF 10 Memory Autodialer, Built-In

Selectable Frequency Steps (5,10, 12.5,15,20 or 25 KHz)

Four Ways to Scan (Band Scan, Memory Scan, Memory Skip, Programmable Scan)

Optional Accessories:

NC-42 1-Hour SMART Desk Charger

E-DC-5 DC Adapter With Noise Filter

MMB-49 Mobile Mounting Bracket

YH-2 Headset for VOX Operation

FBA-12 AA 6-Cell Holder

Some accessories and options are standard in certain areas. Check with your Yaesu Dealer for details.

YAESU

Performance without compromise.

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See us in Booth 521,522,523,533,and 534 We are a Hamvention Prize Donor

STANDARD®

C228A :
"Everyone loved it"
......QST – June 1991
(They even used the C228A as a reference to compare to other dual-banders!!!)
CTCSS (encode-decode) INCLUDED!
The first & only H/T with 2 Meters AND 220 MHz!
2 Meters & 440MHz NEW!
700mAh NiCad!
STANDARD C228A
144/220 FM TWIN BANDER
STANDARD C528A
144/450 FM TWIN BANDER

➤ Lowest power requirement for maximum battery life.

True "TWIN" Band (not just dual band) in a hand held transceiver.

➤ Receiver sensitivity is an unbeatable 0.158 uV for 12 dB SINAD! Unbeatable out-of-band sensitivity and frequency coverage.

➤ 40 Memories + 2 call memories with up to 20 offsets and CTCSS tones! Large, easy to read twin display, one side for each band. Enter a new frequency directly via the keyboard, or with the rotary frequency selector. The rotary selector even doubles as a memory channel selector in the memory mode.

➤ Scan the first 10 memories or last 10, scan all 20 memories, scan selected memory channels, scan a 1 MHz segment of the band, all except 1 MHz, or scan the entire band. Even scan a single frequency for proper PL tone! Double the number of scanning modes, because in any mode you can select pause scan or busy scan. Pause scan stops on an active channel, but resumes after a few seconds so you hear everything that's going on. Busy scan stops on an active channel and holds until the frequency goes clear. Dual watch which lets you monitor two frequencies at the same time.

➤ DTMF encoded Code Squelch and Paging modes allow selective calling or paging to call a friend at a busy hamfest or page through a repeater. DTMF tones are automatically sent at the beginning of each transmission which unlock only the desired compatible receiver.

➤ Clone mode allows you to quickly program a friend's new STANDARD HT from yours. All memory contents including frequencies, offsets and CTCSS tones are copied over the air from one HT to the other in less than one minute!

➤ Extremely wide (6V to 16V DC) power requirement allows you to operate these HT's directly from your automobile's 12V system without regulation. Get full 5 watt output when operated from 12VDC or more.

➤ Full 16 key DTMF pad and VHF/UHF Full-Duplex operation allows full duplex telephone calls through equipped repeaters.

➤ Each HT includes 700 mAh 7.2 volt NiCad battery pack and charger. High efficiency base loaded antenna out performs other antennas and works great out-of-band as well.

➤ C228A also operates in cross band half-duplex mode (if desired) and can store one DTMF memory to access your favorite autopatch number or control code.

For more information on this and other STANDARD products, contact your nearest dealer or call STANDARD Amateur Radio Products at (312) 763-0081.

Specifications, price and features are subject to change without obligation or notice. All products carry a ONE YEAR limited warranty.

STANDARD Amateur Radio Products, Inc.
P.O. Box 48480
Niles, Illinois 60648

STANDARD

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Within budget. Without compromise.

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Need a dual-range output power supply? The HP E3610 Series makes choosing a 30-watt dc power supply easy—especially when you consider the low noise and **$300*** price.

What about a digital multimeter for bench or system use? The rugged 6 ½ digit HP 34401A does both with uncompromised performance for **$995***.

You won't find a better 100 MHz digitizing scope than the HP 54600 Series. It combines analog look and feel with digital troubleshooting power for only **$2,395** (2-channel) or **$2,895** (4-channel)*.

At **$3,800***, the HP 4263A LCR Meter lowers the cost of high-precision 100 Hz to 100 kHz benchtop and system component measurements.

And the 8-function HP E2377A is just one of the HP E2300 Series 3 ½ digit handhelds priced from **$99** to **$189***.

☎ **For more information or same-day shipment from HP DIRECT, call 1-800-452-4844**.** Ask for **Ext. T529** and we'll send you a data sheet that shows how affordable performance can be.

* U.S. list price
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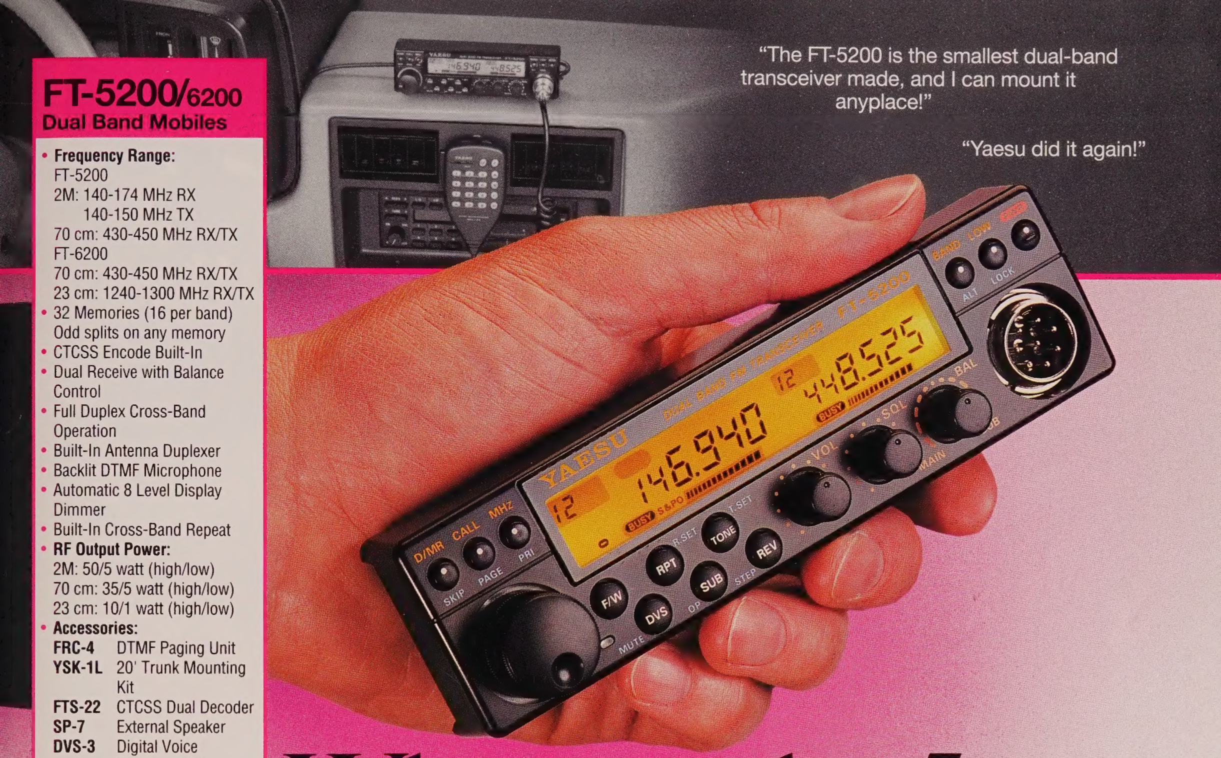
FT-5200/6200
Dual Band Mobiles

- **Frequency Range:**
  FT-5200
  2M: 140-174 MHz RX
  140-150 MHz TX
  70 cm: 430-450 MHz RX/TX
  FT-6200
  70 cm: 430-450 MHz RX/TX
  23 cm: 1240-1300 MHz RX/TX
- 32 Memories (16 per band)
  Odd splits on any memory
- CTCSS Encode Built-In
- Dual Receive with Balance Control
- Full Duplex Cross-Band Operation
- Built-In Antenna Duplexer
- Backlit DTMF Microphone
- Automatic 8 Level Display Dimmer
- Built-In Cross-Band Repeat
- **RF Output Power:**
  2M: 50/5 watt (high/low)
  70 cm: 35/5 watt (high/low)
  23 cm: 10/1 watt (high/low)
- **Accessories:**

FRC-4	DTMF Paging Unit
YSK-1L	20' Trunk Mounting Kit
FTS-22	CTCSS Dual Decoder
SP-7	External Speaker
DVS-3	Digital Voice Recorder Unit
MW-1	Wireless Microphone /Controller



"The FT-5200 is the smallest dual-band transceiver made, and I can mount it anyplace!"

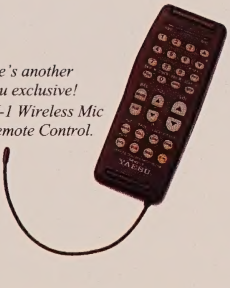
"Yaesu did it again!"

What weighs 5 oz., lights up, snaps off and fits in your pocket?

Don't have the answer? Yaesu does. It's the exclusive removable front control panel of the FT-5200/6200 – the smallest, lowest priced dual-band mobile radios made.

With the use of the optional adjustable control panel bracket kit, you can conveniently mount the "smallest" control panel almost anyplace in your car and mount the transceiver body out of sight. When you leave your car, snap off the 5 oz. front control panel and take it with you. Now your rig's secure. For safer autopatch operation at night, you'll find another Yaesu exclusive – a back-lit DTMF mic. And there's also a built-in antenna duplexer and easy-to-read dual full-frequency liquid crystal display.

Now you have the answer, too. The FT-5200 – packed with features, affordably priced. Don't have one? Better contact your dealer today!



Here's another Yaesu exclusive! The MW-1 Wireless Mic with Remote Control.

YAESU

Performance without compromise.℠

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KENWOOD

Mobile Companion!

TM-241A
TM-441A/TM-541A
Compact FM Mobile transceivers

Here are your new mobile companions — at your service whenever you're on the road! Their compact size makes installation a snap, and the remote control options allow you to customize your installation for that "professional" look!

- **Wide band receiver coverage.** The TM-241A receives from 118–173.995 MHz. Transmit range is 144–148 MHz. (Modifiable for MARS and CAP operation, permits required.)
- **TM-441A** covers 438–449.995 MHz, and the **TM-531A** covers 1240–1299.995 MHz.
- **CTCSS encode built-in, selectable from the front panel.**
- **Selectable frequency steps** for quick and easy QSY.
- **TM-241A provides 50 W. TM-441A 35 W, and TM-541A 10 W.** Three power positions, 5, 10, and full. The TM-541A has two power positions, 1 and 10 watts.
- **20 full-function memory** channels store frequency, repeater offset, sub-tone frequencies, and repeater reverse information. **Repeater offset on 2m is automatically selected.** There are **four channels** for "odd split" operation.
- **Tone Alert System with Elapsed Time indicator.**
- **Auto-power off function, and time-out timer.**

RC-20 Remote Control Unit
As supplied, one RC-20 will control one transceiver. **Most often-used front panel functions** are controllable from the RC-20. The RC-20 and IF-20 combine to allow control of up to four radios.

- **Selective calling and pager option.** The DTU-2 option enables the Dual Tone Squelch System (DTSS), allowing selective calling and paging using standard DTMF tones.
- **Digital recording system option.** Used in conjunction with the tone alert system, the DRU-1 allows message storage of up to 32 seconds.
- **Multiple scanning functions.** Band and memory scan, with selectable scan stops and memory channel lock-out.
- **Large LCD display with four-step dimmer control.**
- **Automatic Lock Tuning (ALT) for the TM-541A.** Compensates for drift.
- **Supplied accessories.** Mounting bracket, DC cable, fuses, MC-44DM multi-function DTMF mic.

Optional accessories
• **DRU-1** Digital Recording Unit • **DTU-2** DTSS unit • **IF-20** Interface unit, used with the RC-20, allows more than two transceivers to be remotely controlled • **MA-700** 2m/70cm dual band antenna with duplexer (mount not supplied) • **MB-201** Extra mounting bracket • **MC-44** Multi-function hand microphone • **MC-55** (8-pin) Mobile mic. with time-out timer • **MC-60A, MC-80, MC-85** Base station mics. • **PG-2N** Extra DC cable • **PG-3B** DC line noise filter • **PG-4G** Extra control cable • **PG-4H** Interface connecting cable • **PG-4J** Extension cable kit • **PS-50/PS-430** DC power supplies • **RC-10** Handset remote controller • **RC-20** Remote control head • **SP-41** Compact mobile speaker • **SP-50B** Mobile speaker • **TSU-6** Programmable CTCSS decoder

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COMMUNICATIONS & TEST EQUIPMENT GROUP
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Key options

DSP-100 Digital Signal Processor. **AT-300** 160 - 10 m external antenna tuner. **AT-850** 160 - 10 m internal antenna tuner. **DRU-2** Internal digital recording unit. **IF-232C** Computer interface. **PG-2X** DC cable. **PS-52** Power supply. **SO-2** TCXO. **SP-31** Matching external speaker. **VS-2** Voice synthesizer. **YG-455C-1** 500 Hz CW filter for 455 kHz IF. **YG-455CN-1** 250 Hz CW filter for 455 kHz IF. **YK-88C-1** 500 Hz CW filter for 8.83 MHz IF. **YK-88CN-1** 270 Hz CW filter for 8.83 MHz IF. **YK-88SN-1** 1.8 kHz SSB filter for 8.83 MHz IF.

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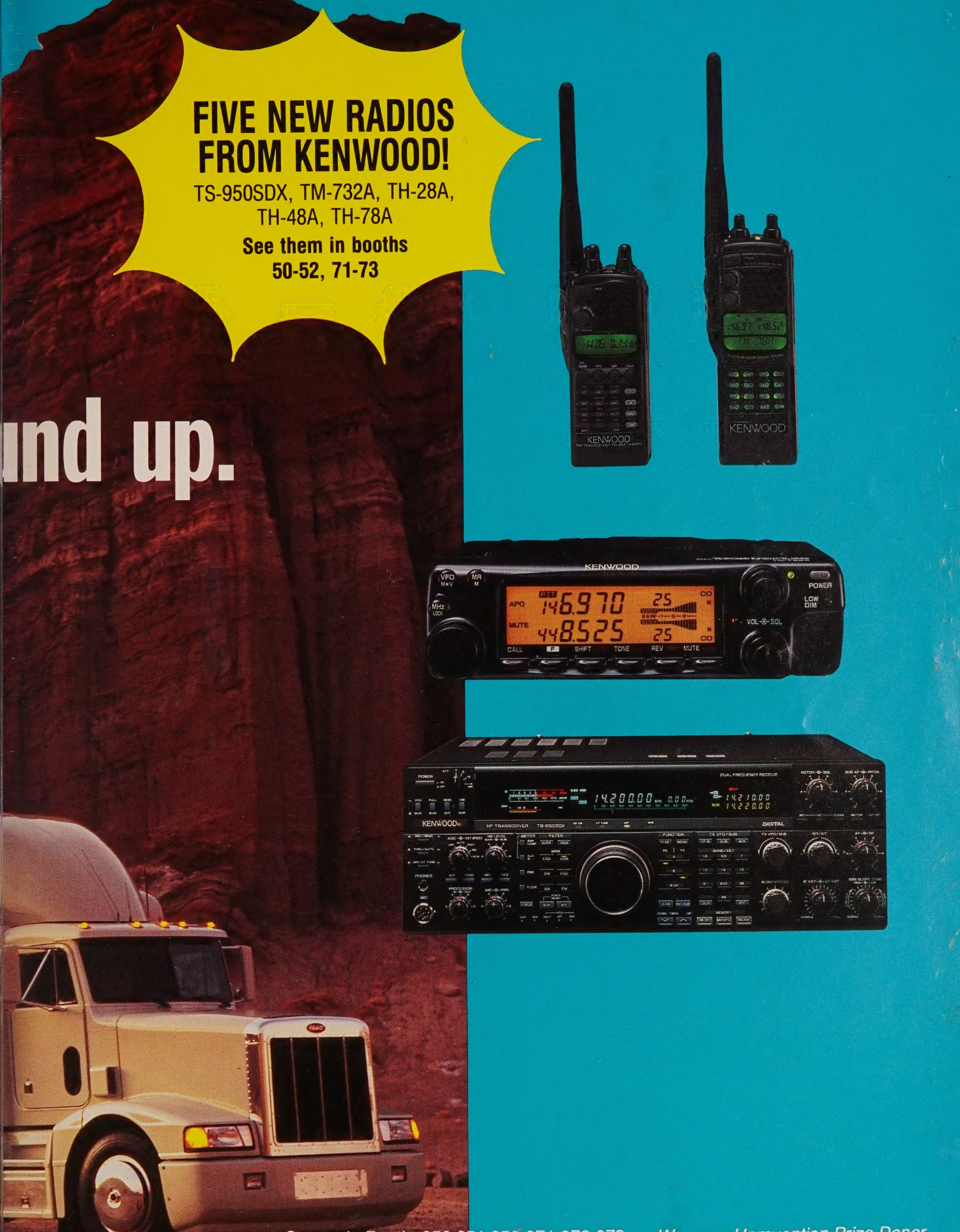

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- General coverage receiver. 150kHz-30MHz.
- 108 dB Dynamic Range with Advanced Intercept Point (AIP).
- 100% Duty Cycle Transmitter allows continuous transmission (Key Down) at full power output for periods up to one hour with PS-53 heavy duty power supply.
- Direct Digital Synthesizer (DDS) allows fine-tuning in 1 Hz steps.
- Digital Signal Processor (optional) DSP-100, another Kenwood exclusive!
- New CW REVERSE MODE and PITCH CONTROL.
- Primary Function Control.
- Selectable IF Filter with Memory.
- Transceiver-to-Transceiver Data Transfer.
- IF Shift.
- Special circuit design, including Triple Conversion.
- 100 Memory Channels.
- New Ten-Key "Telephone Pad" Layout.
- Digital Bar Meter and Multi-function Display.
- Internal Automatic Antenna Tuner (optional).
- Three Scan Modes.
- Switchable AGC (slow/fast) Circuit. Front Panel VOX Control All-Mode Squelch Circuit.

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